

```
=> d stat que l15
L1          1 SEA FILE=REGISTRY ABB=ON  PLU=ON  ERYTHROPOIETIN/CN
L3          1 SEA FILE=REGISTRY ABB=ON  PLU=ON  THAM/CN
L13         14931 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 OR ERYTHROPOIETIN?
L14         6724 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 OR TRISHYDROXYMETHYLAMINOME
           THANE?
L15         18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L13 AND L14
```

=> d ibib abs hitstr l15 1-18

L15 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:850743 HCAPLUS Full-text  
 DOCUMENT NUMBER: 147:308033  
 TITLE: Application of erythropoietin carbamoyl derivative  
       to prepare the medical preparations  
 INVENTOR(S): Lu, Chuanzhen; Xiao, Baoguo; Ding, Jing; Zhou,  
                 Yongchun; Zhang, Yujing  
 PATENT ASSIGNEE(S): Huashan Hospital, Fudan University, Peop. Rep. China;  
                     Shanghai Clonbiotech Co., Ltd.  
 SOURCE: Faming Zhanli Shengqing Gongkai Shuomingshu, 17pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101007166	A	20070801	CN 2006-10147583	20061220
PRIORITY APPLN. INFO.:			CN 2006-10147583	20061220
AB	The invention relates to the application of erythropoietin carbamoyl derivative to prepare the medical preps. for promoting nerve cell regeneration, preventing and treating nerve cell injury, treating acute hypoxic ischemic encephalopathy (such as respiratory dysfunction and oxygen insufficiency induced by wound, nerve gas, status epilepsy, respiratory muscle paralysis, and anesthesia accident; respiratory tract obstruction and pulmonary alveolar hypoxia induced by severe glosso-coma induced by laryngeal edema or spasm, severe pulmonary edema, foreign body of respiratory tract, and coma; Hb oxygen-carrying dysfunction induced by CO or nitrates toxicosis; cerebral ischemia induced by acute hemorrhea, severe heart failure, emphysema, cardiac extra systole, respiratory arrest, and hypoxemia), chronic hypoxic encephalopathy (such as pulmonary encephalopathy, coronary heart disease, ischemic cerebrovascular disease, blood hyperviscosity, arteriosclerotic hypertension, shock, acute respiratory failure, CO toxicosis, and vascular dementia).			
IT	11096-26-7DP, Erythropoietin, carbamoyl derivative RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (application of erythropoietin carbamoyl derivative to prepare the medical preps.)			
RN	11096-26-7 HCAPLUS			
CN	Erythropoietin (CA INDEX NAME)			

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 IT 11096-26-7, Erythropoietin

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (application of erythropoietin carbamoyl derivative to prepare the  
 medical preps.)

RN 11096-26-7 HCAPLUS

CN Erythropoietin (CA INDEX NAME)

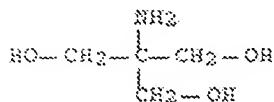
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 77-86-1, Tris

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (application of erythropoietin carbamoyl derivative to prepare the  
 medical preps.)

RN 77-86-1 HCAPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



L15 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:817006 HCAPLUS Full-text

DOCUMENT NUMBER: 147:197358

TITLE: Stable therapeutic formulations

INVENTOR(S): Ameri, Mahmoud; Cormier, Michel J. N.; Sellers, Scott;  
 Maa, Yuh-Fun

PATENT ASSIGNEE(S): Alza Corp., USA

SOURCE: PCT Int. Appl., 50pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

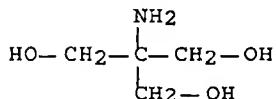
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007084247	A2	20070726	WO 2006-US49488	20061228
WO 2007084247	A9	20070913		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
US 20070184096	A1	20070809	US 2006-617639	20061228

PRIORITY APPLN. INFO.: US 2005-754948P P 20051228

AB Compns. of and methods for formulating and delivering biol. active agent  
 formulations having enhanced phys. stability, and wherein deterioration from  
 the presence of oxygen and/or water is minimized and/or controlled, to yield a

stable formulation are claimed. The compns. of and methods for formulating and delivering biol. active agents of the present invention further facilitate their incorporation into a biocompatible coating which can be employed to coat a stratum corneum piercing microprojection, or a plurality of stratum corneum piercing microprojections of a delivery device, for delivery of the biocompatible coating through the skin of a subject, thus providing an effective means of delivering the biol. active agents. A delivery device having stratum corneum piercing microprojections coated with a formulation of hPTH (1-34) was prepared. The primary packaging for all dosages of the systems was a heat sealed foil pouch purged with nitrogen gas. The moisture and oxygen levels were substantially reduced in the packages.

IT 77-86-1, Tromethamine 11096-26-7, Erythropoietin  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (stable therapeutic formulations)  
 RN 77-86-1 HCAPLUS  
 CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS  
 CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L15 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:735323 HCAPLUS Full-text  
 DOCUMENT NUMBER: 145:174327  
 TITLE: Therapeutic peptide formulations with improved stability for transdermal delivery  
 INVENTOR(S): Cormier, Michel J. N.; Ameri, Mahmoud  
 PATENT ASSIGNEE(S): Alza Corporation, USA  
 SOURCE: PCT Int. Appl., 41 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006079019	A2	20060727	WO 2006-US2262	20060119
WO 2006079019	A3	20061221		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,			

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM

AU 2006206272	A1	20060727	AU 2006-206272	20060119
CA 2593112	A1	20060727	CA 2006-2593112	20060119
US 20060188555	A1	20060824	US 2006-336134	20060119
EP 1838290	A2	20071003	EP 2006-719212	20060119
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101106979	A	20080116	CN 2006-80002845	20060119
IN 2007DN04891	A	20070817	IN 2007-DN4891	20070625
PRIORITY APPLN. INFO.:				
			US 2005-645996P	P 20050121
			WO 2006-US2262	W 20060119

AB Compns. of and methods for formulating and delivering peptide, polypeptide and protein therapeutic agent formulations having enhanced phys. stability, and wherein fibril formation is minimized and/or controlled, to yield a consistent and predictable composition viscosity are provided. The compns. of and methods for formulating and delivering peptide, polypeptide and protein therapeutic agents of the present invention further facilitate their incorporation into a biocompatible coating which can be employed to coat a stratum-corneum piercing microprojection, or a plurality of stratum-corneum piercing microprojections of a transdermal delivery device, for delivery of the biocompatible coating through the skin of a subject, thus providing an effective means of delivering the peptide therapeutic agents. Thus, to an aqueous solution of the GRF analog TH 9507 acetate salt, chloride ions (as sodium chloride) were added. As added chloride ion nears an equimolar concentration to that of acetate, the solution viscosity was relatively low and stable, and fibril formation was minimal. Where there was a molar excess of acetate or chloride, the viscosity increased and changed over time, with evidence of fibril formation.

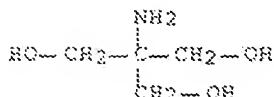
IT 77-86-1, Tromethamine 11096-26-7, Erythropoietin

RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(peptides or proteins delivery system with improved stability incorporated in coating for transdermal microprojector)

RN 77-86-1 HCPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCPLUS

CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L15 ANSWER 4 OF 18 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:343036 HCPLUS Full-text

DOCUMENT NUMBER: 144:382029

TITLE: Use of nitrogen-containing compounds for the prevention of drug-induced cell toxicity

INVENTOR(S): Nykjaer, Anders

PATENT ASSIGNEE(S): Recepticon Aps, Den.

SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

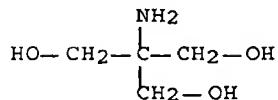
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006037335	A2	20060413	WO 2005-DK640	20051005
WO 2006037335	A3	20061207		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
CA 2581489	A1	20060413	CA 2005-2581489	20051005
EP 1809381	A2	20070725	EP 2005-788843	20051005
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
CN 101076372	A	20071121	CN 2005-80034127	20051005
IN 2007CN01409	A	20070831	IN 2007-CN1409	20070405
PRIORITY APPLN. INFO.:			DK 2004-1529	A 20041006
			WO 2005-DK640	W 20051005

OTHER SOURCE(S): MARPAT 144:382029

AB The invention discloses the use of compds. for the manufacture of a medicament for the prophylaxis and/or treatment of induced cell toxicity, e.g. nephrotoxicity and ototoxicity, in particular where the cell toxicity is induced by a medical treatment. In a preferred embodiment, the compds. have at least two nitrogen atoms, more preferably at least two amino groups. The compds. of the invention are capable of docking binding of cytotoxic compds. to the megalin receptor, and thereby inhibiting uptake of the cytotoxic compds. into cells. The invention further discloses compds. for use in the treatment, as well as a method for reducing the cell toxicity of cytotoxic compds.

IT 77-86-1, Tromethamine 11096-26-7, Erythropoietin  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (nitrogen-containing compds. for prevention of drug-induced cell toxicity)

RN 77-86-1 HCPLUS  
 CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCPLUS  
 CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L15 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:79129 HCAPLUS Full-text  
 DOCUMENT NUMBER: 144:177464  
 TITLE: Fatty acid formulations for oral delivery of proteins  
 and peptides, and uses thereof  
 INVENTOR(S): Radhakrishnan, Balasingam; Aggarwal, Diti; Ferro,  
 Michelle; James, Kenneth D.; Malkar, Navdeep B.;  
 Miller, Mark A.; Pavliv, Leo; Polowy, Karen; Puskas,  
 Monica; Ekwuribe, Nnochiri N.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 103 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

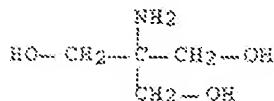
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060018874	A1	20060126	US 2005-184528	20050719
US 20060019873	A1	20060126	US 2005-184594	20050719
US 20060019874	A1	20060126	US 2005-184668	20050719
AU 2005269753	A2	20060209	AU 2005-269753	20050719
AU 2005269753	A1	20060209		
CA 2580313	A1	20060209	CA 2005-2580313	20050719
WO 2006014673	A2	20060209	WO 2005-US25644	20050719
WO 2006014673	A3	20060817		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, NW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1773878	A2	20070418	EP 2005-773736	20050719
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101027318	A	20070829	CN 2005-80031521	20050719
JP 2008506782	T	20080306	JP 2007-522670	20050719
MX 200700883	A	20070402	MX 2007-883	20070119
NO 2007000859	A	20070412	NO 2007-859	20070215
IN 2007DN01264	A	20070803	IN 2007-DN1264	20070215
KR 2007059060	A	20070611	KR 2007-703822	20070216
PRIORITY APPLN. INFO.:			US 2004-589058P	P 20040719
			US 2004-619153P	P 20041015
			US 2004-632578P	P 20041202
			US 2005-655803P	P 20050224
			US 2005-655838P	P 20050224
OTHER SOURCE(S):	MARPAT 144:177464		WO 2005-US25644	W 20050719

AB Fatty acid compns. for administration of pharmaceutical agents, such as proteins and peptides, protein and peptide conjugates, and/or cation-polypeptide conjugate complexes are described. In particular, the invention provides a solid pharmaceutical composition formulated for oral administration by ingestion, having about 0.1 to about 75% weight/weight fatty acid component comprising saturated or unsatd. C4-12 fatty acids and/or salts of such fatty acids, and a therapeutic agent. Further, the invention provides a liquid pharmaceutical composition formulated for oral administration by ingestion, having about 0.1 to about 10% weight/volume fatty acid component comprising saturated or unsatd. C4-12 fatty acids and/or salts of such fatty acids, and a therapeutic agent. For example, an oral liquid diluent was prepared containing tromethamine 4.24, trolamine 5.22, citric acid 6.72, sodium hydroxide pellets 1.88, capric acid 0.50, lauric acid 0.50, 1N NaOH or 1N HCl as needed to pH 7.7-7.9, and water to 100%. Insulin derivs. IN105, HIM2 or ZnHIM2 was combined in amts. necessary to achieve appropriate concentration for dosing studies, e.g., 1 mg, with 1 mL of formulation to yield a 1 mg/mL insulin derivative in formulation.

IT 77-86-1, Tromethamine 11096-26-7, Erythropoietin  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (fatty acid formulations for oral delivery of proteins and peptides)

RN 77-86-1 HCPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCPLUS  
 CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L15 ANSWER 6 OF 18 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:983999 HCPLUS Full-text  
 DOCUMENT NUMBER: 143:282201  
 TITLE: Solution additives for the attenuation of protein aggregation  
 INVENTOR(S): Bernhardt, Trout L.; Wang, Daniel I. C.; Baynes, Brian N.  
 PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA  
 SOURCE: PCT Int. Appl., 90 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005082109	A2	20050909	WO 2005-US6603	20050228
WO 2005082109	A3	20060504		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,  
 SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-547969P P 20040226

OTHER SOURCE(S): MARPAT 143:282201

AB In part, the present invention relates to a compound or polymer comprising a non-protein-binding moiety and at least one protein-binding group. The present invention relates to a method of screening compds. or polymers for the property of inhibiting protein aggregation in solution, a method of preparing a compound or polymer having the property of protein aggregation inhibition in solution, a method of classifying a compound or polymer as either inhibitory of protein aggregation in solution or not inhibitory of protein aggregation in solution, and to a method of determining the preferential binding coefficient,  $\Gamma_{XP}$ , of an additive in a protein solution. The present invention also relates to a method of suppressing or preventing aggregation of a protein in solution, a method of decreasing the toxicol. risk associated with administering a protein to a mammal in need thereof, and a method of facilitating native folding of a recombinant protein in solution. Refolding of carbonic anhydrase was accomplished by dilution from high concns. of guanidinium chloride.

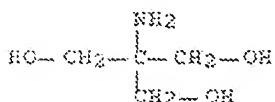
IT 77-86-1D, TRIS, dendrimers

RL: PRP (Properties)

(as nonprotein-binding component of compound attenuating protein aggregation; solution additives for attenuation of protein aggregation)

RN 77-86-1 HCPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



IT 11096-26-7, Erythropoietin

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)

(recombinant human; solution additives for attenuation of protein aggregation)

RN 11096-26-7 HCPLUS

CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L15 ANSWER 7 OF 18 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:614580 HCPLUS Full-text

DOCUMENT NUMBER: 143:139175

TITLE: Frequency-assisted transdermal agent delivery method and system

INVENTOR(S): Chan, Keith T.; Cormier, Michel J. N.; Lin, WeiQi

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 24 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050153873	A1	20050714	US 2004-971441	20041021
AU 2004314416	A1	20050804	AU 2004-314416	20041021
WO 2005069758	A2	20050804	WO 2004-US34923	20041021
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
BR 2004017757	A	20070410	BR 2004-17757	20041021
JP 2007519446	T	20070719	JP 2006-549239	20041021
PRIORITY APPLN. INFO.:				
			US 2004-535275P	P 20040109
			WO 2004-US34923	W 20041021

AB The invention discloses an apparatus and method for transdermally delivering a biol. active agent comprising a delivery system having a microprojection member (or system) that includes a plurality of microprojections (or array thereof) that are adapted to pierce through the stratum corneum into the underlying epidermis layer, or epidermis and dermis layers, a formulation containing the biol. active agent and an oscillation-inducing device. In one embodiment, the biol. active agent is contained in a biocompatible coating that is applied to the microprojection member. In a further embodiment, the delivery system includes a gel pack having an agent-containing hydrogel formulation that is disposed on the microprojection member after application to the skin of a patient. In an alternative embodiment, the biol. active agent is contained in both the coating and the hydrogel formulation.

IT 11096-26-7, Erythropoietin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (frequency-assisted transdermal agent delivery method and system)

RN 11096-26-7 HCPLUS

CN Erythropoietin (CA INDEX NAME)

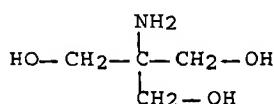
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 77-86-1, Tromethamine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (frequency-assisted transdermal agent delivery method and system)

RN 77-86-1 HCPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



L15 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:497219 HCAPLUS Full-text  
 DOCUMENT NUMBER: 143:32345  
 TITLE: Controlled solubility transdermal formulations with counter ions for coating microprojections of an applicator  
 INVENTOR(S): Ameri, Mahmoud; Lin, Weiqi; Cormier, Michel J. N.; Maa, Yuh-Fun  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U.S. Ser. No. 880,702.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050123507	A1	20050609	US 2005-34891	20050112
US 20040265354	A1	20041230	US 2004-880702	20040629
AU 2004255218	A1	20050120	AU 2004-255218	20040629
CA 2530531	A1	20050120	CA 2004-2530531	20040629
EP 1638523	A2	20060329	EP 2004-756422	20040629
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004012029	A	20060905	BR 2004-12029	20040629
CN 1842320	A	20061004	CN 2004-80024334	20040629
JP 2007527392	T	20070927	JP 2006-518731	20040629
AU 2004253571	A1	20050113	AU 2004-253571	20040701
CA 2530954	A1	20050113	CA 2004-2530954	20040701
WO 2005002453	A1	20050113	WO 2004-US21393	20040701
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20050025778	A1	20050203	US 2004-884603	20040701
EP 1643918	A1	20060412	EP 2004-756609	20040701
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004012202	A	20060822	BR 2004-12202	20040701
CN 1845708	A	20061011	CN 2004-80025139	20040701
JP 2007521092	T	20070802	JP 2006-518804	20040701
MX 2006PA00281	A	20060703	MX 2006-PA281	20060105
MX 2006PA00094	A	20061009	MX 2006-PA94	20060105
AU 2006204977	A1	20060720	AU 2006-204977	20060111
CA 2593111	A1	20060720	CA 2006-2593111	20060111
WO 2006076403	A1	20060720	WO 2006-US934	20060111
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,  
 KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,  
 MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,  
 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
 VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

EP 1835857 A1 20070926 EP 2006-718051 20060111

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

CN 101137333 A 20080305 CN 2006-80007669 20070910

PRIORITY APPLN. INFO.:  
 US 2003-484020P P 20030630  
 US 2003-484930P P 20030702  
 US 2004-880702 A2 20040629  
 WO 2004-US21004 W 20040629  
 WO 2004-US21393 W 20040701  
 US 2005-34891 A 20050112  
 WO 2006-US934 W 20060111

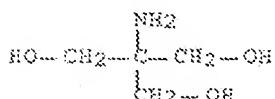
AB The invention provides a composition for coating a transdermal delivery device having stratum corneum-piercing microprojections comprising a formulation of a biol. active agent, a nonvolatile counterion and a volatile counterion, wherein said nonvolatile counterion causes the formation of a first species of said biol. active agent that has improved solubility when said formulation is dried and wherein said volatile counterion causes the formation of a second species of said biol. active agent that has reduced solubility when said formulation is dried. The biol. active agents include hormones.

IT 77-86-1, Tromethamine 11096-26-7, Erythropoietin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (controlled solubility transdermal formulations with counter ions for  
 coating microprojections of an applicator)

RN 77-86-1 HCPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCPLUS

CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L15 ANSWER 9 OF 18 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:485352 HCPLUS Full-text

DOCUMENT NUMBER: 143:13400

TITLE: Erythropoietin solution formulation

INVENTOR(S): Arnold, Stefan; Franssen, Okke; Mekking, Albert

PATENT ASSIGNEE(S): Biogenerix Ag, Germany

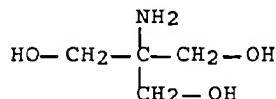
SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1537876	A1	20050608	EP 2003-27460	20031201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AU 2004294289	A1	20050616	AU 2004-294289	20041201
CA 2545880	A1	20050616	CA 2004-2545880	20041201
WO 2005053745	A1	20050616	WO 2004-EP13619	20041201
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AT 355081	T	20060315	AT 2004-803390	20041201
EP 1689437	A1	20060816	EP 2004-803390	20041201
EP 1689437	B1	20070228		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR, IS				
BR 2004016679	A	20070213	BR 2004-16679	20041201
ES 2280057	T3	20070901	ES 2004-803390	20041201
MX 2006PA05791	A	20060714	MX 2006-PA5791	20060522
US 20070128231	A1	20070607	US 2006-581269	20060601
PRIORITY APPLN. INFO.:			EP 2003-27460	A 20031201
			WO 2004-EP13619	W 20041201

AB A stable pharmaceutical formulation of erythropoietin is disclosed which contains tris-(hydroxymethyl)-aminomethane as stabilizer, whereby the formulation does not contain amino acids or human serum albumin.  
 IT 77-86-1, Tris-(hydroxymethyl)-aminomethane  
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (stable erythropoietin solution formulation)  
 RN 77-86-1 HCPLUS  
 CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl) - (CA INDEX NAME)



IT 11096-26-7, Erythropoietin  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (stable erythropoietin solution formulation)

RN 11096-26-7 HCPLUS  
 CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 10 OF 18 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:429196 HCPLUS Full-text  
 DOCUMENT NUMBER: 142:469308  
 TITLE: Coatings on transdermal delivery devices containing biological active agents and viscosity-enhancing counterion  
 INVENTOR(S): Ameri, Mahmoud; Cormier, Michel; Maa, Yuh-fun  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 12 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

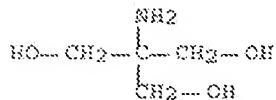
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050106209	A1	20050519	US 2004-970890	20041021
WO 2005042919	A1	20050512	WO 2004-US35053	20041021
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004292954	A1	20050609	AU 2004-292954	20041021
CA 2546280	A1	20050609	CA 2004-2546280	20041021
EP 1682012	A2	20060726	EP 2004-796105	20041021
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004016042	A	20070102	BR 2004-16042	20041021
CN 1901841	A	20070124	CN 2004-80040402	20041021
JP 2007511508	T	20070510	JP 2006-539538	20041021
MX 2006PA05510	A	20061214	MX 2006-PA5510	20060515
KR 2007010115	A	20070122	KR 2006-711237	20060608
PRIORITY APPLN. INFO.:			US 2003-520196P	P 20031113
			WO 2004-US35053	W 20041021

AB Disclosure is a formulation for coating a transdermal delivery device having a plurality of stratum corneum-piercing microprojections, the formulation including a biol. active agent and at least one viscosity-enhancing counterion. Preferably, the formulation has a viscosity in the range of about 20-200 cp. For example the coating containing 20% parathyroid hormone (PTH, the first 34 amino acids), 0.5% hydrochloride and 0.2% Tween 20 was coated on microprojections for delivery of PTH.  
 IT 77-86-1, Tromethamine 11096-26-7, EPO  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(coatings on transdermal delivery microprojections containing biol. active agents and viscosity-enhancing couterions from acids and bases)

RN 77-86-1 HCAPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS

CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L15 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:78076 HCAPLUS Full-text

DOCUMENT NUMBER: 142:151584

TITLE: Target biological material separation from mixtures using superparamagnetic polysaccharide matrices and formation of the superparamagnetic particles

INVENTOR(S): Marchessault, Robert H.; Shingel, Kirill; Ryan, Dominic; Llanes, Francisco; Coquoz, Didier G.; Vinson, Robert K.

PATENT ASSIGNEE(S): Can.

SOURCE: U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U.S. Ser. No. 352,280.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 20050019755	A1	20050127	US 2004-765750	20040127
US 20040146855	A1	20040729	US 2003-352280	20030127
PRIORITY APPLN. INFO.:			US 2003-352280	A2 20030127

AB The present invention features a method for preparing superparamagnetic iron particles by the in situ formation of these particles in a cross-linked starch matrix or by the formation of a superparamagnetic chitosan material. The superparamagnetic materials are formed by mild oxidation of ferrous ion, either entrapped into a cross-linked starch matrix or as a chitosan-Fe(II) complex, with the mild oxidizing agent, nitrate, under alkaline conditions. The present invention further features superparamagnetic iron compns. prepared by the method of the invention. The compns. of the invention are useful for the separation, isolation, identification, or purification of biol. materials. Chitosan and FeCl<sub>2</sub> were incubated to form a complex, the complex was treated with a solution of NH<sub>4</sub>OH and then oxidized with KNO<sub>3</sub> to prepare superparamagnetic chitosan particles (MagChi). The particles were treated with glutaraldehyde and then reacted with protein A. Sodium cyanoborohydride solution was added to the reaction mixture and incubated overnight. The particles were magnetically separated from unreacted protein in the supernatant. Glycine and sodium cyanoborohydride solution were incubated with the particles for one hour. The resulting MagChi matrix modified by covalent

attachment to protein A (MagChi-Protein A) was used to magnetically bind IgG. The MagChi-Protein A matrix showed saturation binding at 2.5 mg of IgG/mg matrix and greater than 90% of the IgG bound could be recovered.

IT 11096-26-7P, Erythropoietin

RL: ANT (Analyte); BSU (Biological study, unclassified); PUR (Purification or recovery); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)

(as target biol. material; target biol. material separation from mixts. using superparamagnetic polysaccharide matrixes and formation of superparamagnetic particles)

RN 11096-26-7 HCPLUS

CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

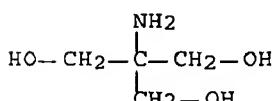
IT 77-86-1, Tris(hydroxymethyl)aminomethane

RL: NUU (Other use, unclassified); USES (Uses)

(buffers; target biol. material separation from mixts. using superparamagnetic polysaccharide matrixes and formation of superparamagnetic particles)

RN 77-86-1 HCPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



L15 ANSWER 12 OF 18 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1879 HCPLUS Full-text

DOCUMENT NUMBER: 142:100377

TITLE: Formulations for coated microprojections containing non-volatile counterions

INVENTOR(S): Ameri, Mahmoud; Lin, Weiqi; Cormier, Michel J. N.; Maa, Yuh-Fun

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 25 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040265354	A1	20041230	US 2004-880702	20040629
AU 2004255218	A1	20050120	AU 2004-255218	20040629
CA 2530531	A1	20050120	CA 2004-2530531	20040629
WO 2005004842	A2	20050120	WO 2004-US21004	20040629
WO 2005004842	A3	20050421		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

EP 1638523 A2 20060329 EP 2004-756422 20040629  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

BR 2004012029 A 20060905 BR 2004-12029 20040629  
 CN 1842320 A 20061004 CN 2004-80024334 20040629  
 JP 2007527392 T 20070927 JP 2006-518731 20040629  
 US 20050123507 A1 20050609 US 2005-34891 20050112  
 MX 2006PA00281 A 20060703 MX 2006-PA281 20060105

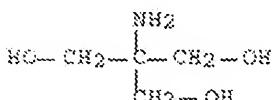
PRIORITY APPLN. INFO.:  
 US 2003-484020P P 20030630  
 US 2003-484930P P 20030702  
 US 2004-880702 A2 20040629  
 WO 2004-US21004 W 20040629

AB The invention provides for a formulation for coating one or more microprojections which reduces or minimizes the loss of counterions from the coating in order to achieve a pH-stabilized formulation. A composition for coating a transdermal delivery device having stratum corneum-piercing microprojections comprises a formulation of a biol. active agent and a non-volatile counterion, wherein the formulation has increased pH stability and solubility when dried. The biol. active agents include hormones and antigens.

IT 77-86-1, Tromethamine 11096-26-7, Erythropoietin  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (transdermal delivery systems using microprojections with drug-containing coating and counterions)

RN 77-86-1 HCPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCPLUS  
 CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

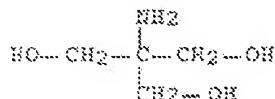
L15 ANSWER 13 OF 18 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:817689 HCPLUS Full-text  
 DOCUMENT NUMBER: 141:325783  
 TITLE: Use of compounds for the prevention of drug-induced cell toxicity  
 INVENTOR(S): Nykjaer, Anders  
 PATENT ASSIGNEE(S): Arhus Universitet, Den.; Recepticon Aps  
 SOURCE: PCT Int. Appl., 55 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004084876	A2	20041007	WO 2004-DK205	20040325
WO 2004084876	A3	20041223		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004224788	A1	20041007	AU 2004-224788	20040325
CA 2560522	A1	20041007	CA 2004-2560522	20040325
EP 1610773	A2	20060104	EP 2004-723168	20040325
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
BR 2004008699	A	20060328	BR 2004-8699	20040325
CN 1794982	A	20060628	CN 2004-80014657	20040325
JP 2006520761	T	20060914	JP 2006-504337	20040325
MX 2005PA10143	A	20060317	MX 2005-PA10143	20050922
IN 2005CN02770	A	20070525	IN 2005-CN2770	20051026
US 20070004727	A1	20070104	US 2006-550488	20060821
DK 2003-459 A 20030326				
WO 2004-DK205 W 20040325				

PRIORITY APPLN. INFO.: AB The present invention relates to the use of compds. for the manufacture of a medicament for the prophylaxis and/or treatment of induced cell toxicity, such as nephrotoxicity and ototoxicity, in particular where the cell toxicity is induced by a medical treatment. In a preferred embodiment the compds. have at least two nitrogen atoms, more preferably at least two amino groups. The compds. according to the invention are capable of blocking binding of cell toxic compds. to the megalin receptor, and thereby inhibiting uptake of the cell toxic compds. into cells. The invention further relates to novel compds. for use in said treatment, as well as a method for reducing the cell toxicity of cell toxic compds.

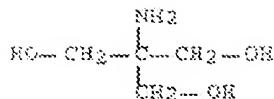
IT 77-86-1, Tromethamine 11096-26-7, Erythropoietin  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(use of compds. for prevention of drug-induced cell toxicity)

RN 77-86-1 HCPLUS  
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl) - (CA INDEX NAME)



RN 11096-26-7 HCPLUS  
CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*



RN 11096-26-7 HCAPLUS  
 CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:532691 HCAPLUS Full-text  
 DOCUMENT NUMBER: 139:95435  
 TITLE: Modified receptors on cell membranes for the discovery of therapeutic ligands  
 INVENTOR(S): Schwartz, Thue W.; Martini, Lene; Heydorn, Arne;  
 Jorgensen, Rasmus  
 PATENT ASSIGNEE(S): 7TM Pharma A/S, Den.  
 SOURCE: PCT Int. Appl., 122 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055914	A2	20030710	WO 2002-DK900	20021220
WO 2003055914	A3	20031023		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002358469	A1	20030715	AU 2002-358469	20021220
PRIORITY APPLN. INFO.:			DK 2001-1944	A 20011221
			DK 2002-113	A 20020122
			DK 2002-1043	A 20020703
			US 2002-394122P	P 20020703
			WO 2002-DK900	W 20021220

AB A drug discovery method is provided for selecting a compound selected from the group consisting of a small organic substance, a biopharmaceutical, or an antibody or part thereof. The method comprises the steps of (i) expressing one or more receptors on a cell membrane, such as, e.g., an exterior cell surface of a cell, (ii) contacting one or more expressed receptors with a test compound or a selection of test compds. (libraries), and (iii) selecting one or more compds. based on its ability to bind one or more receptors. The step of expressing the one or more receptors comprises capturing one or more receptors on the exterior cell surface in a conformation that predominantly

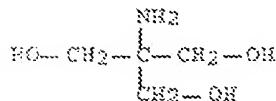
enables binding or interaction with a ligand, and the conformation that predominantly enables binding or interaction with a ligand is provided by modification of one or more receptors by a method comprising at least one of the following: (a) fusion with any protein which keeps the receptor in the desired conformation such as, e.g. an arrestin, a modified arrestin, a G-protein or a modified G-protein, (b) site-directed mutagenesis, and (c) deletion. The receptors may be captured on the exterior cell surface by at least one of the following: (d) interaction of the receptor with a scaffolding protein, optionally, with a scaffolding protein network and (e) means for blocking receptor internalization, e.g. by co-expression of a mutated dynamin or a modified arrestin or by use of chems. such as, e.g., sucrose and/or Tris. Thus, by coexpressing of either the wild-type receptor or by modifying the receptor by engineering for example a recognition motif for a strong binder into its structure (for example, a PDZ recognition motif at its C-terminal end), and coexpression of this with a scaffolding protein such as PSD-95 or a modified scaffolding protein which interacts with the cytoskeleton at the cell surface or is made to be closely associated with the membrane through a lipid anchor, a high level of surface expression can be ensured, which will benefit its use in the drug discovery process. As a result of the strong tendency of the scaffolding proteins to interact with each other, just the cotransfection with one or more appropriate scaffolding proteins or modified scaffolding protein may also lead to the formation of patches with high local concns of the receptor or modified receptor, which will be highly beneficial in the drug discovery process where they are used initially to select binding mols. The method is exemplified by expression of the NK1 receptor in an agonist high-affinity binding form at the surface of transfected cells through fusion with arrestin or the N-terminal fragment of arrestin.

IT 77-86-1, Tris

RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
(impair receptor internalization in presence of; modified receptors on  
cell membranes for discovery of therapeutic ligands)

RN 77-86-1 HCAPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



L15 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:565238 HCAPLUS Full-text

DOCUMENT NUMBER: 135:157676

TITLE: Biodegradable compounds and protein polymers for  
slow-release drug delivery

INVENTOR(S): Rowe, Stephen C.; Yim, Kalvin; Retnarajan, Beadle P.;  
Hubbell, Jeffrey A.; Annavaajula, Durga

PATENT ASSIGNEE(S): Infimed Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001055360	A1	20010802	WO 2001-US2828	20010129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2398788	A1	20010802	CA 2001-2398788	20010129
US 20010048947	A1	20011206	US 2001-772174	20010129
US 6699504	B2	20040302		
EP 1255823	A1	20021113	EP 2001-946892	20010129
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003520810	T	20030708	JP 2001-554391	20010129
BR 2001007942	A	20040106	BR 2001-7942	20010129
CN 1606620	A	20050413	CN 2001-806822	20010129
AU 785288	B2	20061221	AU 2001-29782	20010129
MX 2002PA07281	A	20021209	MX 2002-PA7281	20020726
US 20040156914	A1	20040812	US 2003-650115	20030826
US 6939557	B2	20050906		
US 20060003009	A1	20060105	US 2005-212223	20050826
PRIORITY APPLN. INFO.:			US 2000-178852P	P 20000128
			US 2001-772174	A1 20010129
			WO 2001-US2828	W 20010129
			US 2003-650115	A1 20030826

AB The invention relates to biodegradable compns. for sustained-release drug delivery and methods for administering a biol. active substance via these compns. The invention provides methods and compns. for the administration of a biol. active substance (BAS) in an insol. format. The composition comprises a macromer, a mol. or mixture of mols. which preferentially excludes proteins, and the BAS. By macromer is meant a polymer with three components: (1) a biocompatible, water soluble region; (2) a biodegradable/hydrolyzable region, and (3) at least two polymerizable regions. Poly(ethylene glycol), hyaluronic acid and poly(vinylpyrrolidone) are used as the mols. which preferentially excludes proteins. The compns. of the invention improve the bioavailability of the BAS by formulating the BAS in an insol. format. These methods and compns. provide for the controlled, sustained delivery of relatively large quantities of these substances, with a low burst effect. The invention also features methods of treating an animal using the articles for delivery of a BAS.

IT 11096-26-7, Erythropoietin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(biodegradable compds. and protein polymers for slow-release drug delivery)

RN 11096-26-7 HCAPLUS

CN Erythropoietin (CA INDEX NAME)

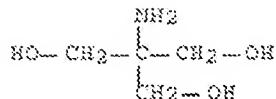
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 77-86-1, Tris

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(ion-carrier; biodegradable compds. and protein polymers for slow-release drug delivery)

RN 77-86-1 HCAPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 17 OF 18 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:491203 HCPLUS Full-text

DOCUMENT NUMBER: 135:221397

TITLE: Kinetic and thermodynamic analysis of thermal unfolding of recombinant erythropoietin

AUTHOR(S): Arakawa, Tsutomu; Philo, John S.; Kita, Yoshiko

CORPORATE SOURCE: Alliance Protein Laboratories, Thousand Oaks, CA, 91360, USA

SOURCE: Bioscience, Biotechnology, and Biochemistry (2001), 65(6), 1321-1327

CODEN: BBBIEJ; ISSN: 0916-8451

PUBLISHER: Japan Society for Bioscience, Biotechnology, and Agrochemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thermal stress was used to assess the stability of recombinant human erythropoietin (EPO) derived from Chinese hamster ovary cells. In 20 mM phosphate at pH 7.0, this protein had a highly reversible thermal unfolding as observed by far UV CD and native gel anal., with no indication of protein aggregation. It had a relatively low melting temperature at 53°. Assuming a two-state transition, the observed reversibility permits thermodn. anal. of the unfolding of EPO, which shows that the free energy of unfolding at 25° is only 6-7 kcal/mol. Upon heating to 79° over 30 min, however, this protein does undergo aggregation as assessed by native gel. In 20 mM phosphate and citrate at pH 7.0, the results are similar, i.e., EPO suffered a substantial aggregation, while it showed little aggregation in 20 mM Tris or histidine at pH 7.0 and 20 mM glycine at pH 6.3 under identical heat treatment.

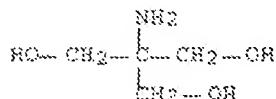
IT 77-86-1, Tris

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(buffers effect on kinetics and thermodn. anal. of thermal unfolding of erythropoietin)

RN 77-86-1 HCPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



IT 11096-26-7, Erythropoietin

RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
 PROC (Process)  
 (recombinant human; kinetics and thermodn. anal. of thermal unfolding  
 of erythropoietin)

RN 11096-26-7 HCAPLUS  
 CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:758900 HCAPLUS Full-text  
 DOCUMENT NUMBER: 126:15184  
 TITLE: Process for purification of glycoproteins like  
 erythropoietin  
 INVENTOR(S): Zanette, Dino; Sarubbi, Edoardo Giacomo; Soffientini,  
 Adolfo; Restelli, Ermengildo; Grigoletto, Armando  
 PATENT ASSIGNEE(S): Gruppo Lepetit S.P.A., Italy  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9632413	A1	19961017	WO 1996-EP1509	19960409
W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, SD, SG, SI, SK, TR, UA, US, UZ, VN, AM, AZ, BY, KZ, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
IL 117849	A	20020725	IL 1996-117849	19960408
CA 2216130	A1	19961017	CA 1996-2216130	19960409
AU 9656457	A	19961030	AU 1996-56457	19960409
AU 693693	B2	19980702		
EP 820468	A1	19980128	EP 1996-913491	19960409
EP 820468	B1	20000628		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
CN 1181759	A	19980513	CN 1996-193298	19960409
HU 9802038	A2	19981228	HU 1998-2038	19960409
HU 9802038	A3	20010129		
HU 225591	B1	20070502		
JP 11503726	T	19990330	JP 1996-530698	19960409
JP 3998156	B2	20071024		
AT 194144	T	20000715	AT 1996-913491	19960409
ES 2147647	T3	20000916	ES 1996-913491	19960409
PT 820468	T	20001130	PT 1996-913491	19960409
CZ 291770	B6	20030514	CZ 1997-3256	19960409
ZA 9602914	A	19961017	ZA 1996-2914	19960412
TW 421652	B	20010211	TW 1996-85104363	19960412
US 5981716	A	19991109	US 1997-898014	19970722
NO 9704524	A	19970930	NO 1997-4524	19970930
NO 317188	B1	20040913		

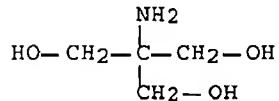
GR 3034294	T3	20001229	GR 2000-401981	20000831
PRIORITY APPLN. INFO.:			EP 1995-200945	A 19950414
			US 1995-475260	A 19950607
			EP 1996-913491	A 19960409
			WO 1996-EP1509	W 19960409

AB The present invention is directed to a simple and efficient process for the recovery of a biol. active glycoprotein from a biol. fluid containing it. It includes a Ph boronate chromatog. step and is particularly suitable for the purification of erythropoietin. Erythropoietin can be purified by applying a semipurified material containing erythropoietin to a dihydroxboronyl chromatog. matrix preequilibrated with a 1st equilibrating buffer, washing with the equilibrating buffer, and eluting with an aqueous buffer having a pH between 7.5-11 containing a compound having 1-hydroxy-2-amino groups and a 1,2-cis-diol containing low-mol.-weight substance.

IT 77-86-1  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (buffer containing; erythropoietin chromatog. purification and eluting buffers therefor)

RN 77-86-1 HCPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



IT 11096-26-7P, Erythropoietin  
 RL: PUR (Purification or recovery); PREP (Preparation)  
 (erythropoietin chromatog. purification and eluting buffers therefor)

RN 11096-26-7 HCPLUS

CN Erythropoietin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

```
=> => d stat que 118
L1      1 SEA FILE=REGISTRY ABB=ON PLU=ON ERYTHROPOIETIN/CN
L2      2283 SEA FILE=REGISTRY ABB=ON PLU=ON ERYTHROPOIETIN? NOT L1
L3      1 SEA FILE=REGISTRY ABB=ON PLU=ON THAM/CN
L4      SEL PLU=ON L1 1- CHEM : 9 TERMS
L5      47045 SEA FILE=HCPLUS ABB=ON PLU=ON L4
L6      47188 SEA FILE=HCPLUS ABB=ON PLU=ON L5 OR L2 OR ERYTHROPOIETIN OR
          EPO
L7      SEL PLU=ON L3 1- CHEM : 53 TERMS
L8      138363 SEA FILE=HCPLUS ABB=ON PLU=ON L7
L9      138382 SEA FILE=HCPLUS ABB=ON PLU=ON L8 OR THAM OR TRISHYDROXYMETHYL
          LAMINOMETHANE OR TRIS?(A)HYDROXY?(A)METHYL?(A)AMINO?(A)METHAN?
L10     159 SEA FILE=HCPLUS ABB=ON PLU=ON L6 (L) L9
L11     3585784 SEA FILE=HCPLUS ABB=ON PLU=ON (SOLUTION/CV OR DISSOLUTION/CV
          ) OR ?SOLUTION?
L12     37 SEA FILE=HCPLUS ABB=ON PLU=ON L10 AND L11
L13     14931 SEA FILE=HCPLUS ABB=ON PLU=ON L1 OR ERYTHROPOIETIN?
L14     6724 SEA FILE=HCPLUS ABB=ON PLU=ON L3 OR TRISHYDROXYMETHYLAMINOMETHANE?
```

L15            18 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND L14  
 L17            37 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND L12  
 L18            36 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 NOT L15

&gt;

&gt;

=&gt; d ibib abs hitstr 118 1-36

L18 ANSWER 1 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:388532 HCAPLUS Full-text  
 DOCUMENT NUMBER: 147:533579  
 TITLE: Study on the  $\pi$ - $\pi$  stacking effect of triphenyl corrole and its copper complexes  
 AUTHOR(S): Liu, Hai-Yang; Guo, Ping-Ye; Xu, Zhi-Guang; Ying, Xiao; Jiang, Huan-Feng; Chang, Chi-Kwong  
 CORPORATE SOURCE: Department of Chemistry, South China University of Technology, Guangzhou, 510641, Peop. Rep. China  
 SOURCE: Wuji Huaxue Xuebao (2007), 23(3), 504-508  
 CODEN: WHUXEO; ISSN: 1001-4861  
 PUBLISHER: Wuji Huaxue Xuebao Bianjibu  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 AB Aggregation behavior of 5,10,15-tris(pentafluorophenyl)corrole (F15TPC), 5,10,15,20-tetrakis(pentafluorophenyl)porphyrin (F20TPP), and their copper complexes in DCM solution were investigated by using UV-vis spectroscopic method. F20TPP and F20TPPCu exhibited strong  $\pi$ - $\pi$  stacking interactions in DCM, and the intermol. dimerization consts. turned out to be  $1.82 \times 10^3$  and  $17.2 \times 10^3$  L/mol $\cdot$ 1, resp. However, extinction coeffs. of F15TPC and F15TPCCu at soret band remained unchanged with increasing in their concns. from 1.0 to 40.0  $\mu$ mol/L $\cdot$ 1, indicating they remained monomeric in DCM solution. Based on DFT calcn. and the  $\pi$ - $\pi$  stacking geometries observed in crystal structures of metal octaethylcorrole complexes, destroy of  $\pi$ - $\pi$  interactions in F15TPC and F15TPCCu may be understood by the electrostatic potential surfaces (EPS) features of the mols. and steric repulsions caused by the introducing of three Ph at the meso- positions of corrole macrocycle.

L18 ANSWER 2 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007:294864 HCAPLUS Full-text  
 TITLE: Ga(III), In(III) and Fe(III) complexes of a new N-functionalized macrocyclic chelator with 3-hydroxy-4-pyrone chelating arms  
 AUTHOR(S): Sreerama, Subramanya G.; Hsieh, Wen-Yuan; Liu, Shuang  
 CORPORATE SOURCE: School of Health Sciences, Purdue University, West Lafayette, IN, 47907, USA  
 SOURCE: Abstracts of Papers, 233rd ACS National Meeting, Chicago, IL, United States, March 25-29, 2007 (2007), INOR-736. American Chemical Society: Washington, D. C.  
 CODEN: 69JAUY  
 DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)  
 LANGUAGE: English  
 AB A new macrocyclic chelator, 1,4,7-tris[methylene-(3-hydroxy-6-hydroxymethyl-4-pyrone)]-1,4,7-triazacyclononane (H3L), was synthesized from the reaction of one equiv of 1,4,7-triazacyclononane (TACN) and three equiv of kojic acid in

the presence of excess formaldehyde. The reaction of H<sub>3</sub>L with trivalent metal ions offered neutral complexes ML (M = Ga, In and Fe). H<sub>3</sub>L and its complexes ML (M = Ga, In and Fe) have been characterized by elemental anal., IR, UV/vis, ESI-MS, NMR and electrochem. method. Solid state structures of GaL and FeL are almost identical and isostructural. The coordination geometry around the metal ion is best described as distorted octahedron with a twist angle .apprx. 59-. FeL is redox active and displays a quasi reversible reduction at E<sub>1/2</sub> = -525mV with ΔE<sub>p</sub> = 73 mV. Variable <sup>1</sup>H NMR data showed that the solution structure of both GaL and InL is rigid without any fluxionality even at temperature as high as 65°C as evidenced by the presence of AB quartets from methylene hydrogens of the TACN backbone. Studies of their thermodn. stability by potentiometric titration are still in progress.

L18 ANSWER 3 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1296279 HCPLUS Full-text

DOCUMENT NUMBER: 146:158443

TITLE: HEPES-Stabilized Encapsulation of *Salmonella typhimurium*

AUTHOR(S): Suo, Zhiyong; Yang, Xinghong; Avci, Recep; Kellerman, Laura; Pascual, David W.; Fries, Marc; Steele, Andrew

CORPORATE SOURCE: Imaging and Chemical Analysis Laboratory, Department of Physics, Montana State University, Bozeman, MT, 59717, USA

SOURCE: Langmuir (2007), 23(3), 1365-1374  
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Most bacteria, planktonic and sessile, are encapsulated inside loosely bound extracellular polymeric substance (EPS) in their physiol. environment. Imaging a bacterium with its capsule requires lengthy sample preparation to enhance the capsular contrast. In this study, *Salmonella typhimurium* was investigated using atomic force microscopy for a practical means of imaging an encapsulated bacterium in air. The investigation further aimed to determine the relation between the buffers used for preparing the bacterium and the preservation of the capsular material surrounding it. It was observed that rinsing bacteria with HEPES buffer could stabilize and promote capsule formation, while rinsing with PBS, Tris, or glycine removes most of the capsular EPS. For bacteria rinsed with HEPES and air-dried, the height images showed only the contour of the capsular material, while the phase and amplitude images presented the detailed structures of the bacterial surface, including the flagella encapsulated inside the capsular EPS. The encapsulation was attributed to the crosslinking of the acidic exopolysaccharides mediated by the piperazine moiety of HEPES through electrostatic attraction. This explanation is supported by encapsulated bacteria observed for samples rinsed with N,N'-bis(2-hydroxyethyl)-piperazine solution and by the presence of entrapped HEPES within the dry capsular EPS suggested by micro-Raman spectroscopy.

REFERENCE COUNT: 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:382970 HCPLUS Full-text

DOCUMENT NUMBER: 144:413641

TITLE: One-pot thermoset epoxy resin compositions for gasohole-fueled automobile parts

INVENTOR(S): Asai, Daijiro

PATENT ASSIGNEE(S): Aica Kogyo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006111800	A	20060427	JP 2004-302685	20041018
PRIORITY APPLN. INFO.:			JP 2004-302685	20041018

AB The compns. with good gasohole (gasoline-alc. blend) fuel resistance contain (A) epoxides, (B) curing agent compns. prepared by reacting amines with epoxides, and (C) fillers. Thus, 0.72 mol Adeka EP 4100 (liquid bisphenol A diglycidyl ether epoxy resin) was added dropwise to a MEK solution containing 2-ethyl-4-methyimidazole 1, 2,4,6- tris(dimethylaminomethyl)phenol 0.1, and N,N-dimethylaminopropylamine 0.1 mol, stirred while refluxing, treated under decreased pressure for MEK removal, cooled to give a fine yellow solid, and pulverized to give a hardener composition, 40 parts of which was mixed with Adeka EP 4100 100, diisodecyl adipate 6, and Whiton SB 40 parts to give a 1-pot curable composition with gel time at 90° 7 min, good storage stability, and high shear adhesion when bonding SPCC-SD sheets.

L18 ANSWER 5 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:252223 HCPLUS Full-text  
 DOCUMENT NUMBER: 145:309739  
 TITLE: Study on the interaction of bovine serum albumin with acid cyanine 5R and its application in analysis  
 AUTHOR(S): Lu, Fei; Pan, Jing-Hao; Liu, Yun; Zhang, Hongfen; Guo, Yujing; Wang, Yingte  
 CORPORATE SOURCE: Chemistry Department, School of Chemistry and Chemical Engineering, Shanxi University, Taiyuan, 030006, Peop. Rep. China  
 SOURCE: Biochemistry and Cell Biology (2006), 84(1), 1-8  
 CODEN: BCBIEQ; ISSN: 0829-8211  
 PUBLISHER: National Research Council of Canada  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A supramol. complex of bovine serum albumin (BSA) with acid cyanine 5R (AC 5R, C.I. acid blue 113, C.I.: 26360) has been shown to form in Tris-HCl buffer solution (pH 7.42) by linear sweep voltammetry (LSV), fluorometry, and spectrophotometry. The binding ratio and binding constant of BSA with AC 5R have been detected by LSV and fluorometry. The binding mechanism is also preliminarily discussed. In Tris-HCl buffer solution (pH 7.42), AC 5R can easily be reduced on the mercury electrode, and it has a well-defined LSV peak current ( $I_p$ ) and peak potential ( $E_p$ ) at -0.65 V (vs. SCE). In the presence of BSA, the  $I_p$  of AC 5R decreases, and the peak potential ( $E_p$ ) shifts to a more pos. potential. The decrease of the second-order derivative of reductive peak current ( $\Delta I''p$ ) of AC 5R is proportional to the logarithm of BSA concentration in the range of  $1.54 \times 10^{-8}$  mol·L<sup>-1</sup> -  $1.54 \times 10^{-5}$  mol·L<sup>-1</sup> ( $r = 0.9931-0.9977$ ). The limit of detection of BSA is  $9.0 \times 10^{-9}$  mol·L<sup>-1</sup>. The relative standard deviation is 1.83% ( $n = 10$ ), and the standard recovery is 97.5%-104.8%. This method can be used to determine BSA concentration on the basis of the of BSA with AC 5R.  
 REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:652823 HCPLUS Full-text  
 DOCUMENT NUMBER: 141:273815  
 TITLE: Separation and investigation of structure-mobility relationships of insect oostatic peptides by capillary zone electrophoresis  
 AUTHOR(S): Solinova, Veronika; Kasicka, Vaclav; Koval, Dusan; Hlavacek, Jan  
 CORPORATE SOURCE: Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague, Czech Rep.  
 SOURCE: Electrophoresis (2004), 25(14), 2299-2308  
 CODEN: ELCTDN; ISSN: 0173-0835  
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Capillary zone electrophoresis (CZE) has been applied to qual. anal., separation, and physicochem. characterization of synthetic insect oostatic peptides (IOPs) and their derivs. and fragments. Series of homologous IOPs were separated in three acidic background electrolytes (BGEs; pH 2.25, 2.30, 2.40) and an alkaline BGE (pH 8.1). Best separation was achieved in acid BGE composed of 100 mM H<sub>3</sub>PO<sub>4</sub>, 50 mM Tris, pH 2.25. The effective electrophoretic mobilities,  $\mu_{\text{ep}}$ , of all IOPs in four BGEs were determined and several semiempirical models correlating effective mobility with charge-to-size ratio ( $\mu_{\text{ep}}$  vs. q/M<sub>r</sub>) were tested to describe the migration behavior of IOP in CZE. None of models was found to be unambiguously applicable for the whole set of 20 IOPs differing in size (dipeptide - decapeptide) and charge (-2 to +0.77 elementary charges). However, a high coefficient of correlation, 0.9993, was found for the subset of homologous series of IOPs with decreasing number of proline residues at C-terminus, H-Tyr-Asp-Pro-Ala-Prox-OH, x = 6-0, for the dependence of  $\mu_{\text{ep}}$  on q/M<sub>r</sub> with k = 0.5 for IOPs as anions in alkaline BGE and with k = 2/3 for IOPs as cations in optimized acidic Tris-phosphate BGE. From these dependences the probable structure of IOPs in solution could be predicted.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 7 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:240484 HCPLUS Full-text  
 DOCUMENT NUMBER: 141:16265  
 TITLE: Coupled electron-transfer and spin-exchange reactions of metal-bis[tris(pyrazolyl)methane] complexes  
 AUTHOR(S): Sheets, Josie R.; Schultz, Franklin A.  
 CORPORATE SOURCE: Department of Chemistry, Indiana University-Purdue University Indianapolis, Indianapolis, IN, 46202-3274, USA  
 SOURCE: Polyhedron (2004), 23(6), 1037-1043  
 CODEN: PLYHDE; ISSN: 0277-5387  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 141:16265

AB Coupled electron-transfer and spin-exchange reactions of metal(II)-bis[tris(pyrazolyl)methane] complexes, [M(tpm)<sub>2</sub>]<sup>2+</sup>, with M = Mn, Fe, Co, or Ni and tpm = HC(pz)<sub>3</sub> or HC(3,5-Me<sub>2</sub>pz)<sub>3</sub>, are reported. Apparent heterogeneous electron-transfer rate consts., (k<sub>s</sub>, h)<sub>app</sub>, for [M(tpm)<sub>2</sub>]<sup>2+</sup> to [M(tpm)<sub>2</sub>]<sup>3+</sup> oxidns. are determined from the scan rate dependence of cyclic voltammetric peak potential sepns.,  $\Delta E_p$ . Consistent with the expectation that electron-

transfer reactions that are accompanied by a change in spin-state are slower than those that are not,  $(k_s, h)_{app}$  for oxidation of high-spin (HS)  $\{\text{Fe}[\text{HC}(3,5\text{-Me}_2\text{pz})_3]_2\}_{2+}$  to low-spin (LS)  $\{\text{Fe}[\text{HC}(3,5\text{-Me}_2\text{pz})_3]_2\}_{3+}$  is 10 times smaller than the value for oxidation of predominantly LS  $\{\text{Fe}[\text{HC}(\text{pz})_3]_2\}_{2+}$  to LS  $\{\text{Fe}[\text{HC}(\text{pz})_3]_2\}_{3+}$ . Very small values of  $(k_s, h)_{app}$  are observed for the 1-electron oxidns. of HS  $\{\text{Co}[\text{HC}(\text{pz})_3]_2\}_{2+}$  and HS  $\{\text{Mn}[\text{HC}(3,5\text{-Me}_2\text{pz})_3]_2\}_{2+}$ . The electrochem., magnetic, and spectroscopic properties of  $[\text{M}(\text{tpm})_2]_{2+}$  complexes are similar to those of the corresponding tris(pyrazolyl)borate (pzb-) complexes with the exception that, because of net charge considerations, the M(III/II) potential is .apprx.1 V more pos. for  $[\text{M}(\text{tpm})_2]_{3+}/_{2+}$  than for  $[\text{M}(\text{pzb})_2]_{+}/0$  couples. The stability of  $[\text{M}(\text{tpm})_2]_{2+}$  complexes in MeCN and DMF solution was studied by pos. ion electrospray ionization mass spectrometry.  $\{\text{Fe}[\text{HC}(\text{pz})_3]_2\}_{2+}$  undergoes ligand dissociation in DMF.

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 8 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:27591 HCPLUS Full-text  
 DOCUMENT NUMBER: 141:94881  
 TITLE: Extraction of palladium from nitric acid solutions with tris[(diphenylphosphinothioyl)methyl]ethylmethane  
 AUTHOR(S): Turanov, A. N.; Karandashev, V. K.; Baulin, V. E.  
 CORPORATE SOURCE: Inst. Fiz. Tverdogo Tela, RAN, Chernogolovka, Russia  
 SOURCE: Zhurnal Neorganicheskoi Khimii (2003), 48(11), 1917-1920  
 CODEN: ZNOKAQ; ISSN: 0044-457X  
 PUBLISHER: MAIK Nauka/Interperiodica Publishing  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 AB The palladium(2+) distribution was studied between nitric acid aqueous solns. and the solution of the new; y prepared ethyl-tris[(diphenylthiophosphinyl)methyl]methane (L) in methylene chloride. The cation transfers into organic phase as a complex of the 1:1 stoichiometry. The ion selectivity is observed during extraction with a macroporous polymer sorbent impregnated with L. A comparison was made with the solvent extraction of palladium and other metals with triphenylphosphine sulfide (Ph<sub>3</sub>PS).

L18 ANSWER 9 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:863029 HCPLUS Full-text  
 DOCUMENT NUMBER: 139:331900  
 TITLE: Field amplified sample injection of cationic and anionic ions at positive voltage capillary electrophoresis using tris(2,2'-bipyridyl)ruthenium(II) electrochemiluminescence detection system  
 AUTHOR(S): Liu, Ji-Feng; Yang, Xiu-Rong; Wang, Er-Kang  
 CORPORATE SOURCE: State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China  
 SOURCE: Gaodeng Xuexiao Huaxue Xuebao (2003), 24(10), 1798-1800  
 CODEN: KTHPDM; ISSN: 0251-0790  
 PUBLISHER: Gaodeng Jiaoyu Chubanshe  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese

AB The field-amplified sample injection behavior of cationic tripropylamine (TPA) and anionic proline (Pro) at a pos. voltage in capillary electrophoresis with tris(2,2'-bipyridyl)ruthenium(II) electrochemiluminescence (ECL) detection system was studied. In the case of TPA, where the sample solution was prepared in pure water, ECL sensitivity can be improved by 100 times compared to conventional electroinjection method when a pos. voltage was applied. Under the same pos. voltage condition, anionic Pro prepared in electrolyte solution can also be injected and concentrated in the column when a water plug was injected before sample introduction. The sensitivity and efficiency were enhanced by 10 and 46 times, resp. The behavior of cationic TPA can be explained by conventional field amplified sample injection (FASI) theory. When the ratio of resistivities of sample matrix to that of separation buffer is less than 1 ( $\gamma \ll 1$ ), the conventional FASI theory can also be used to explain the improved sensitivity and theor. plates of Pro. The sensitivity, plate, velocity ( $v_{ep}$ ), amplified factor ( $v_{ep}/v_{ep0}$ ) and peak variance ( $\sigma^2$ ) of Pro reach maximum at optimized water plug length and buffer concentration of the sample matrix.

L18 ANSWER 10 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:560472 HCPLUS Full-text

DOCUMENT NUMBER: 139:302159

TITLE: Electrochemical behavior of epinephrine at deoxyribonucleic acid-modified gold electrodes and influence of lead ion

AUTHOR(S): Tang, Ping; Zeng, Baizhao

CORPORATE SOURCE: College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, 430072, Peop. Rep. China

SOURCE: Fenxi Huaxue (2003), 31(6), 641-645  
CODEN: FHHHDT; ISSN: 0253-3820

PUBLISHER: Kexue Chubanshe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB DNA modified gold electrodes were prepared by the dry adsorptive method. At these electrodes, the electrochem. behavior of epinephrine (EP) and the influence of lead ion were studied by cyclic voltammetry, chronocoulometry, differential pulse voltammetry, alternating impedance and UV spectrometry. It was found that in 5 mmol/L Tris buffer solns. (pH 7.7) at DNA/Au electrode epinephrine exhibited an irreversible anodic peak ( $E_p = 0.16$  V). This peak was at more pos. potential and was more sensitive compared with that at bare gold electrodes produced by epinephrine ( $E_p = 0.11$  V). In the presence of  $Pb^{2+}$  the peak shifted toward neg. and the peak height increased. Even more, the peak height was linear to EP concentration over the range of 0.5.apprx.75  $\mu$ mol/L. The electrode process was also studied. When there was no  $Pb^{2+}$  the EP could interact with DNA through intercalating in the double spiral of DNA in addition to electrostatic attraction. In the presence of  $Pb^{2+}$  there were two forms of combinations, i.e. the intercalation of EP- $Pb^{2+}$  in the double spiral of DNA and electrostatic attraction between DNA and EP/EP- $Pb^{2+}$ .

L18 ANSWER 11 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:428974 HCPLUS Full-text

DOCUMENT NUMBER: 139:67756

TITLE: Kit for detecting antibodies to encephalomyelitis virus in poultry

INVENTOR(S): Borisov, A. V.; Kuznetsov, V. N.; Gusev, A. A.; Irza, V. N.; Belyaeva, N. V.; Krest'yaninova, S. K.; Men'shchikova, A. E.

PATENT ASSIGNEE(S) : Federal'noe Gosudarstvennoe Uchrezhdenie Vserossiiskii Nauchno-Issledovatel'skii Institut Zashchity Zhivotnykh, Russia  
 SOURCE: Russ., No pp. given  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2199126	C2	20030220	RU 2001-105771	20010302
PRIORITY APPLN. INFO.: RU 2001-105771 20010302				
AB The disclosed kit contains the purified and inactivated antigen of the poultry encephalomyelitis virus (EP) immobilized on the solid carrier, dry pos. chicken blood serum to EP virus, dry neg. chicken blood serum, and dry anti-specific immunoperoxidase conjugate against chicken IgG, addnl. containing carboxyl-containing cationite KB-4P-2. Every component and cationite KB-4P-2 are applied at the following ratio, %: 2:98-15:85. Of the nonspecific components the disclosed kit contains tris buffer solution, phosphate-citrate buffer, orthophenylene diamine dyestuff or 2,2-azino-di [3-ethyl] benzthiazolinesulfonic acid, solution to stop reaction dyeing process, detergent twin-20, and the washing solution. The disclosed kit is highly active, specific, of low cost, and is highly stable during storage.				

L18 ANSWER 12 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:114299 HCPLUS Full-text  
 DOCUMENT NUMBER: 138:313351  
 TITLE: Dioxo-Bridged Dinuclear Manganese(III) and -(IV)  
 Complexes of Pyridyl Donor Tripod Ligands: Combined  
 Effects of Steric Substitution and Chelate Ring Size  
 Variations on Structural, Spectroscopic, and  
 Electrochemical Properties  
 AUTHOR(S): Gultneh, Yilma; Yisgedu, Teshome B.; Tesema, Yohannes  
 T.; Butcher, Ray J.  
 CORPORATE SOURCE: Department of Chemistry, Howard University,  
 Washington, DC, 20059, USA  
 SOURCE: Inorganic Chemistry (2003), 42(6), 1857-1867  
 CODEN: INOCAJ; ISSN: 0020-1669  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:313351

AB The syntheses and structural, spectral, and electrochem. characterization of the dioxo-bridged dinuclear Mn(III) complexes  $[LMn(\mu-O)2MnL](ClO_4)_2$ , of the tripodal ligands tris(6-methyl-2-pyridylmethyl)amine (L1) and bis(6-methyl-2-pyridylmethyl)(2-(2-pyridyl)ethyl)amine (L2), and the Mn(II) complex of bis(2-(2-pyridyl)ethyl)(6-methyl-2-pyridylmethyl)amine (L3) are described. Addition of aqueous H<sub>2</sub>O<sub>2</sub> to MeOH solns. of the Mn(II) complexes of L1 and L2 produced green solns. in a fast reaction from which subsequently precipitated brown solids of the dioxo-bridged dinuclear (1) and (2), resp., which have the general formula  $[LMnIII(\mu-O)2MnIIIL](ClO_4)_2$ . Addition of 30% aqueous H<sub>2</sub>O<sub>2</sub> to the MeOH solution of the Mn(II) complex of L3 ( $[MnIIL_3(MeCN)(H_2O)](ClO_4)_2$  (3)) showed a very sluggish change gradually precipitating an insol. black gummy solid, but no dioxo-bridged Mn complex is produced. By contrast, the Mn(II) complex of the ligand bis(2-(2-pyridyl)ethyl)(2-pyridylmethyl)amine (L3a) is

reported to react with aqueous H<sub>2</sub>O<sub>2</sub> to form the dioxo-bridged Mn<sup>IIIMnIV</sup> complex. In cyclic voltammetric expts. in MeCN solution, 1 shows two reversible peaks at E<sub>1/2</sub> = 0.87 and 1.70 V (vs. Ag/AgCl) assigned to the Mn<sup>III2</sup> ↔ Mn<sup>IIIMnIV</sup> and the Mn<sup>IIIMnIV</sup> ↔ Mn<sup>IV2</sup> processes, resp. 2 Also shows two reversible peaks, one at E<sub>1/2</sub> = 0.78 V and a 2nd peak at E<sub>1/2</sub> = 1.58 V (vs. Ag/AgCl) assigned to the Mn<sup>III2</sup> ↔ Mn<sup>IIIMnIV</sup> and Mn<sup>IIIMnIV</sup> ↔ Mn<sup>IV2</sup> redox processes, resp. These potentials are the highest so far observed for the dioxo-bridged dinuclear Mn complexes of the type of tripodal ligands used here. The bulk electrolytic oxidation of complexes 1 and 2, at a controlled anodic potential of 1.98 V (vs. Ag/AgCl), produced the green Mn<sup>IV2</sup> complexes that were spectrally characterized. The Mn(II) complex of L<sub>3</sub> shows a quasi reversible peak at an anodic potential of E<sub>p,a</sub> of 1.96 V (vs. Ag/AgCl) assigned to the oxidation Mn(II) to Mn(III) complex. It is .apprx.0.17 V higher than the E<sub>p,a</sub> of the Mn(II) complex of L<sub>3a</sub>. The higher oxidation potential is attributable to the steric effect of the Me substituent at the 6-position of the pyridyl donor of L<sub>3</sub>.

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 13 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:860443 HCPLUS Full-text

DOCUMENT NUMBER: 134:147897

TITLE: Continuous solution copolymerization of ethylene with propylene using a constrained geometry catalyst system

AUTHOR(S): Park, Shinjoon; Wang, Wen-Jun; Zhu, Shiping

CORPORATE SOURCE: Department of Chemical Engineering, McMaster University, Hamilton, ON, L8S 4L7, Can.

SOURCE: Macromolecular Chemistry and Physics (2000), 201(16), 2203-2209

CODEN: MCHPES; ISSN: 1022-1352

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Ethylene (E)/propylene (P) continuous solution copolymer, using the constrained geometry catalyst system, [CpMe<sub>4</sub>(SiMe<sub>2</sub>NtBu)]TiMe<sub>2</sub> (CGC)/tris(pentafluorophenyl)boron/modified methylalumininoxane, was carried out at 3.45 × 10<sup>3</sup> kPa and 130, 140, and 150°C. Ethylene and propylene copolymers with a broad range of composition fractions were synthesized and characterized. The incorporation of propylene lowered the catalyst activity and increased chain termination reactions. The estimated reactivity ratios r<sub>E</sub> and r<sub>P</sub> were 2.89 and 0.324 at 130°C, 4.33 and 0.377 at 140°C, and 6.36 and 0.436 at 150°C, resp. The relatively low r<sub>E</sub> and high r<sub>P</sub> values of CGC compared to other metallocene systems indicated a ready incorporation of propylene in ethylene/propylene copolymer. The activation energies ΔE<sub>E</sub> and ΔE<sub>P</sub> were 56 and 21 kJ/mol, showing a more significant effect of polymerization temperature on r<sub>E</sub> than on r<sub>P</sub>. The reactivity ratios for normal propylene, inverted propylene, and ethylene were also estimated from the methylene sequence distributions.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 14 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:197980 HCPLUS Full-text

DOCUMENT NUMBER: 132:227484

TITLE: Aqueous formulations of biologically active polypeptides

INVENTOR(S) : Papadimitriou, Apollon  
 PATENT ASSIGNEE(S) : Hoffmann-La Roche, A.-G., Switz.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000086532	A	20000328	JP 1999-248013	19990901
JP 3664373	B2	20050622		
TW 570805	B	20040111	TW 1999-88114073	19990818
EP 1002547	A1	20000524	EP 1999-116537	19990824
EP 1002547	B1	20060301		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY				
AT 318616	T	20060315	AT 1999-116537	19990824
ES 2258830	T3	20060901	ES 1999-116537	19990824
CN 1250669	A	20000419	CN 1999-119245	19990827
NZ 337527	A	20001222	NZ 1999-337527	19990827
SG 85670	A1	20020115	SG 1999-4209	19990827
KR 2000022777	A	20000425	KR 1999-36053	19990828
IN 1999MA00858	A	20050304	IN 1999-MA858	19990830
NO 9904214	A	20000302	NO 1999-4214	19990831
AU 9944866	A	20000316	AU 1999-44866	19990831
AU 755930	B2	20030102		
TR 9902103	A2	20000421	TR 1999-2103	19990831
HR 990272	A1	20000630	HR 1999-272	19990831
HR 990272	B1	20061130		
ZA 9905601	A	20000927	ZA 1999-5601	19990831
MX 9908037	A	20000930	MX 1999-8037	19990831
RU 2180855	C2	20020327	RU 1999-118890	19990831
HU 9902952	A1	20000628	HU 1999-2952	19990901
BR 9903984	A	20010313	BR 1999-3984	19990901
PL 194218	B1	20070531	PL 1999-335203	19990901
US 20020028766	A1	20020307	US 2001-953721	20010917
US 6867182	B2	20050315		
US 20050123610	A1	20050609	US 2005-32492	20050110
US 20080064854	A1	20080313	US 2007-931118 EP 1998-116494	20071031 A 19980901
PRIORITY APPLN. INFO. :			US 1999-385404 US 2001-953721 US 2005-32492	A3 19990830 A1 20010917 A1 20050110

AB This invention relates to drug delivery systems of polypeptides with improved solubility. Pharmacol. active polypeptides selected from the group consisting of hedgehog proteins, osteogenic factors, growth factors, erythropoietin, thrombopoietin, G-CSF, interleukins, and interferons, are combined with amphipathic substances to form ionic complexes in formulating aqueous compns.  $\alpha$ -Interferon in Tris buffer (pH 7.4) was dialyzed in a solution containing deoxycholic acid and phosphatidylserine and formulated with a solution containing NaCl, Na phosphate buffer solution and deoxycholic acid for injection.

DOCUMENT NUMBER: 132:161693  
 TITLE: Preparation of human erythropoietin by cultivating transgenic mammalian cells in modified cell culture medium  
 INVENTOR(S): Lou, Dan; Xu, Liping; Zou, Zhongcheng  
 PATENT ASSIGNEE(S): Shenyang Sansheng Pharmaceutical Incorporated Co., Ltd., Peop. Rep. China  
 SOURCE: Faming Zhuanli Shengqing Gongkai Shuomingshu, 7 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

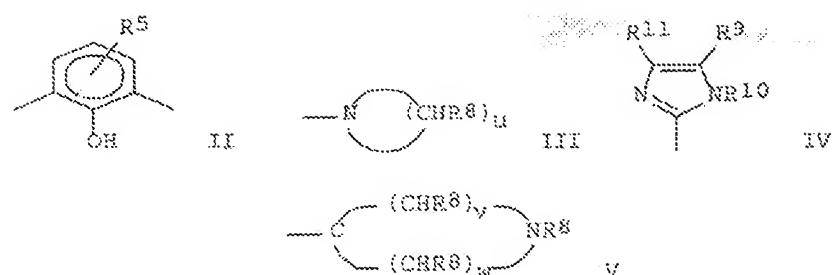
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1190130	A	19980812	CN 1998-100248	19980119
PRIORITY APPLN. INFO.:			CN 1998-100248	19980119

AB Described is an improved method for producing human erythropoietin (EPO) by cultivating transgenic mammalian cells expressing the human EPO-encoding sequence in the modified DMEM culture medium, followed by purification. The DMEM culture is modified by adding insulin 1 nM-10 mM, transferrin 0.1-100 nM, Se 1-1,000 ppm, glucose 1-10 g/L, and NaHCO<sub>3</sub> 2-4 g/L. The EPO in the medium can be purified by affinity column chromatog., ion exchange column chromatog., reversed phase liquid chromatog., and gel filtration. In affinity chromatog., the column is eluted with 20 mM Tris-HCl buffer solution containing 0-2 M NaCl gradient. In ion exchange column chromatog., the column is eluted with 0-1 M NaCl gradient. In reversed phase liquid chromatog., the column is eluted with 10- 70% (volume/volume) acetonitrile. In gel filtration, the column is eluted with 10-40 mM citrate buffer solution to obtain 100% pure human EPO.

L18 ANSWER 16 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:156846 HCPLUS Full-text  
 DOCUMENT NUMBER: 130:239209  
 TITLE: Granular detergent compositions with good stability of peroxy compounds and amylase during storage for automatic dishwashers  
 INVENTOR(S): Okano, Tomomichi; Nishida, Shigeo; Yamamoto, Nobuyuki; Kubozono, Takayasu  
 PATENT ASSIGNEE(S): Lion Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11061187	A	19990305	JP 1997-239019	19970820
PRIORITY APPLN. INFO.:			JP 1997-239019	19970820
OTHER SOURCE(S):		MARPAT 130:239209		

GI



AB Title compns. having low angle of repose, contain (a) peroxy compds. generating H<sub>2</sub>O<sub>2</sub> in aqueous solns, (b) amylases, (c) nonionic surfactants, (d) inorg. compds. with oil absorption (JIS K 6220) ≥100 mL/100 g, (e) ligands [A(CHR1)n]2N(CHR3)pXr(CHR4)qN[(CHR2)mB]2 or I [X = CR<sub>3</sub>(OH), NR<sub>5</sub>, O, II; Y = CR<sub>5</sub>OH, NR<sub>5</sub>; A, B = NR<sub>6</sub>R<sub>7</sub>, QR<sub>8t</sub>, N:CR<sub>6</sub>R<sub>7</sub>, III, IV, V; Q = pyridyl; R<sub>1-5</sub>, R<sub>15</sub>, R<sub>16</sub> = H, (substituted) alkyl, cycloalkyl, or aryl; R<sub>6-11</sub> = H, OH, (substituted) alkyl, cycloalkyl, aryl; R<sub>8</sub> = alkyl, alkoxy, halo, CN, NR<sub>12</sub>R<sub>13</sub>, N+R<sub>12</sub>R<sub>13</sub>R<sub>14</sub>, N:CR<sub>12</sub>R<sub>13</sub>, SO<sub>3</sub>H, CO<sub>2</sub>H, OH, pyridyl, pyridinium, thiienyl; R<sub>12-14</sub> = H, OH, (substituted) alkyl, cycloalkyl, aryl; n, m = 0-2; p, q = 0-3; r = 0-1; s = 2-5; t = 0-4; u = 2-7; v, w = 0-7], and (f) transition metals. Thus, a detergent comprising Na<sub>2</sub>CO<sub>3</sub> 22, Na citrate 10, Tokusil N (oil absorption 250 mL/100 g) 2, Softanol EP 90100 5, SPC-D (Na percarbonate) 10, tris[(2-pyridyl)methyl]amine 0.2, MnCl<sub>2</sub> 0.02, Duramyl 60T 0.5, limonene 0.2%, and balance Na<sub>2</sub>SO<sub>4</sub> showed good bleaching properties and storage stability.

L18 ANSWER 17 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:134448 HCAPLUS Full-text

DOCUMENT NUMBER: 130:198180

**TITLE:** Granular bleaching detergent compositions with good fluidity and good storage stability for automatic dishwashers

INVENTOR(S) : Okano, Tomomichi; Nishida, Nobuo; Yamamoto, Nobuyuki;  
Ono, Junji

PATENT ASSIGNEE(S) : Lion Corp., Japan

SOURCE: Jpn. Kokai Tokkyo

CODEN: JKXXAF

DOCUMENT TYPE: Patent

**LANGUAGE:** Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

www.ijerph.org

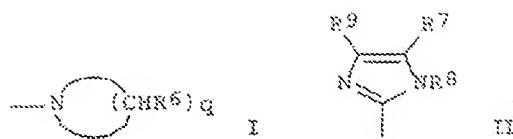
PATENT NO. \_\_\_\_\_ KIND. \_\_\_\_\_ D.

PATENT NO. 5,530,077

JTB 11050096 A 19990233

BB

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
JP 11050096	A	19990223	JP 1997-220976	19970801
RITY APPLN. INFO.:			JP 1997-220976	19970801
RE SOURCE(S):	MARPAT	130:198180		



AB Title compns. having low angle of repose contain (a) peroxy compds. generating H<sub>2</sub>O<sub>2</sub> in aqueous solns, (b) amylases, (c) nonionic surfactants, (d) inorg. compds. with oil absorption (JIS K 6220) ≥100 mL/100 g, (e) N-containing ligands B(CHR<sub>1</sub>)<sub>n</sub>X[(CHR<sub>2</sub>)<sub>m</sub>A]<sub>2</sub> [X = N, P CR<sub>3</sub>; n = 0-2; m = 0-2; R<sub>1-3</sub> = H, (substituted) alkyl, cycloalkyl, aryl; A, B = NR<sub>4</sub>R<sub>5</sub>, QR<sub>6</sub>p, I, II, N:CR<sub>4</sub>R<sub>5</sub>; Q = pyridyl; p = 0-4; q = 2-7; R<sub>4-9</sub> = H, OH, alkyl, cycloalkyl, aryl; R<sub>6</sub> = H, (substituted) alkyl, alkoxy, halo, CN, NR<sub>10</sub>R<sub>11</sub>, NR<sub>10</sub>R<sub>11</sub>R<sub>12</sub>, N:CR<sub>10</sub>R<sub>11</sub>, SO<sub>3</sub>H, CO<sub>2</sub>H, OH, pyridyl, pyridinium, thienyl; R<sub>10-12</sub> = H, OH, (substituted) alkyl, cycloalkyl, aryl], and (f) transition metals. Thus, a detergent comprising Na<sub>2</sub>CO<sub>3</sub> 22, 3Na citrate 10, Tokusil N (oil absorption 250 mL/100 g) 2, Softanol EP 90100 5, Na percarbonate 10, tris[(2-pyridyl)methyl]amine 0.2, MnCl<sub>2</sub> 0.02, Duramyl 60T 0.5, limonene 0.2%, and balance Na<sub>2</sub>SO<sub>4</sub> showed good bleaching properties and storage stability.

L18 ANSWER 18 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:581408 HCPLUS Full-text

DOCUMENT NUMBER: 129:251600

TITLE: Evaluation of the electrochemical characteristics of a poly(vinyl alcohol)/poly(acrylic acid) polymer blend

AUTHOR(S): Dasenbrock, Catherine O.; Ridgway, Thomas H.; Seliskar, Carl J.; Heineman, William R.

CORPORATE SOURCE: Dep. Chem., Univ. Cincinnati, Cincinnati, OH, 45221-0172, USA

SOURCE: Electrochimica Acta (1998), 43(23), 3497-3502  
CODEN: ELCAAV; ISSN: 0013-4686

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The polymer blend poly(vinyl alc.)/poly(acrylic acid) (PVA/PAA) was evaluated as a coating on graphite electrodes. The uptake of tris(2,2'-bipyridyl)ruthenium(II), Ru(bpy)<sub>3</sub><sup>2+</sup>, by the film was monitored by cyclic voltammetry and is pH dependent. A plot of current response vs. pH is analogous to a titration curve of a mixture of acids with pKa values at 4-6. At pH 1 where the PVA/PAA film is neutral, voltammograms of Ru(bpy)<sub>3</sub><sup>2+</sup> were comparable to ones recorded at a bare electrode. At pH 7, where the film is anionic because the carboxyl group is deprotonated, a current enhancement factor of 9 to 16 compared to a bare electrode was obtained. This pH-dependent behavior is also observable for plots of the peak separation vs. pH in which E<sub>p</sub> of cyclic voltammograms increases with pH. The effect of different supporting electrolytes was studied by measuring the current response with LiNO<sub>3</sub>, NaNO<sub>3</sub>, and KNO<sub>3</sub> over a range of pH. Cyclic voltammograms of Fe(CN)<sub>6</sub><sup>3-</sup> showed that neg. charged species are rejected by the polymer film.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 19 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:172896 HCPLUS Full-text

DOCUMENT NUMBER: 128:187824

TITLE: Structure and Physical Properties of Trigonal  
 Monopyramidal Iron(II), Cobalt(II), Nickel(II), and  
 Zinc(II) Complexes  
 AUTHOR(S): Ray, Manabendra; Hammes, Brian; Yap, Glenn P. A.;  
 Rheingold, Arnold L.; Borovik, A. S.  
 CORPORATE SOURCE: Departments of Chemistry, Kansas State University,  
 Manhattan, 19716, USA  
 SOURCE: Inorganic Chemistry (1998), 37(7), 1527-1532  
 CODEN: INOCAJ; ISSN: 0020-1669  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Trigonal monopyramidal complexes of the tripodal ligand tris((N-tert-  
 butylcarbamoyl)methyl)aminato, [1But]3-, were synthesized and characterized.  
 The structures of [Co1But]-, [Zn1But]-, and [Ni1But]- confirm that trigonal  
 monopyramidal coordination geometry occurs in these complexes where the three  
 amide nitrogens are arranged in the trigonal plane and the amine N is bonded  
 apically to the metal ions. The solid-state structures of [Co1But]-,  
 [Zn1But]-, and [Ni1But]- are nearly identical indicating that the trigonal  
 ligand [1But]3- enforces the trigonal monopyramidal structure in these metal  
 ions. Crystal data: K[Co1But]·0.5DMF crystallizes in the monoclinic space  
 group C2/c, with cell dimensions a 18.844(4), b 9.809(3), c 28.715(13) Å, β  
 102.70°, and Z = 8; (NET4)[Zn1But]·THF crystallizes in the monoclinic space  
 group P21/c, with a 13.244(3), b 11.285(5), c 25.625(3) Å, β 104.45(1)°, and z  
 = 4. The 1H NMR spectrum of the diamagnetic [Zn1But]- also suggests that the  
 complex retains its C3 symmetry in solution. Room-temperature magnetic  
 susceptibility measurements show that [Fe1But]-, [Co1But]-, and [Ni1But]- are  
 high spin. The cyclic voltammetry of [Co1But]- and [Ni1But]- at a glassy C  
 surface and at a scan rate of 100 mV s-1 shows quasi-reversible one electron  
 oxidation at E1/2 = 0.77 ( $\Delta E_p$  = 93 mV, ipcipa-1 = 0.69) and 0.56 ( $\Delta E_p$  = 75 mV,  
 ipcipa-1 = 0.79) V vs. SCE, resp. However, at slower scan rates these redox  
 processes become irreversible and attempts to isolate the oxidized products at  
 room temperature were unsuccessful. The chemical oxidation of [Ni1But]- with  
 [Fe(bpy)3]3- in 1:1 propionitrile-DMF mixture at -75° generated an EPR-active  
 species (77 K, g1 = 2.29, g2 = 2.16, g3 = 2.03, a3 = 20 G) assigned to a  
 Ni(III) complex with rhombic symmetry. [Fe1But]- shows one irreversible  
 oxidation ( $E_p$ , a = 0.05 V vs. SCE) under the same conditions. These results are  
 consistent with [1But]3- being able to stabilize trigonal monopyramidal  
 complexes of low-valent metal ions.  
 REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 20 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995:281169 HCPLUS Full-text  
 DOCUMENT NUMBER: 122:239830  
 TITLE: Tri(1-cyclohepta-2,4,6-trienyl)phosphine, P(C7H7)3,  
 and tetra(1-cyclohepta-2,4,6-trienyl)phosphonium  
 tetrafluoroborate, [P(C7H7)4]BF4  
 AUTHOR(S): Herberhold, Max; Bauer, Kurt; Milius, Wolfgang  
 CORPORATE SOURCE: Lab. Anorganische Chemie, Universitaet Bayreuth,  
 Bayreuth, Germany  
 SOURCE: Zeitschrift fuer Anorganische und Allgemeine Chemie  
 (1994), 620(12), 2108-13  
 CODEN: ZAACAB; ISSN: 0044-2313  
 PUBLISHER: Barth  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German

OTHER SOURCE(S): CASREACT 122:239830

AB The reaction of tris(trimethylsilyl)phosphine, P(SiMe<sub>3</sub>)<sub>3</sub>, with tropylidium bromide, C<sub>7</sub>H<sub>7</sub><sup>+</sup>Br<sup>-</sup>, in polar solvents such as dichloromethane or THF gives P(C<sub>7</sub>H<sub>7</sub>)<sub>3</sub> (1) and [P(C<sub>7</sub>H<sub>7</sub>)<sub>4</sub>]Br (2a). According to the x-ray crystallog. structure detns., all 1-cyclohepta-2,4,6-trienyl substituents are present in the boat conformation in both P(C<sub>7</sub>H<sub>7</sub>)<sub>3</sub> (1) and the phosphonium salt, [P(C<sub>7</sub>H<sub>7</sub>)<sub>4</sub>]BF<sub>4</sub> (2b). The boat-shaped C<sub>7</sub>H<sub>7</sub> rings are significantly more flattened if the phosphorus occupies the axial rather than the equatorial position at the ring substituent. Addition of a chalcogen to the lone pair at the central phosphorus atom of 1 leads to the chalcogena-phosphoranes EP(C<sub>7</sub>H<sub>7</sub>)<sub>3</sub> (E = O (3a), S (3b), Se (3c)). The new 1-cyclohepta-2,4,6-trienylphosphorus compds. 1, 2b and 3a-c were characterized by their <sup>1</sup>H, <sup>13</sup>C, and <sup>31</sup>P NMR spectra in C<sub>6</sub>D<sub>6</sub> solution

L18 ANSWER 21 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:523853 HCAPLUS Full-text

DOCUMENT NUMBER: 121:123853

TITLE: Synthesis, Structure, Reactivity, and Solution Behavior of Bis{dicarbonyl[hydridotris(1,2,4-triazolyl)borato]ruthenium(I)}(Ru-Ru)

AUTHOR(S): Shiu, Kom-Bei; Guo, Wei-Ning; Peng, Shie-Ming; Cheng, Ming-Chu

CORPORATE SOURCE: Department of Chemistry, National Cheng Kung University, Tainan, 70101, Taiwan

SOURCE: Inorganic Chemistry (1994), 33(13), 3010-13  
CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Reaction of polymeric catena-[Ru(OAc)(CO)<sub>2</sub>] with K hydridotris(1,2,4-triazolyl)borate (KHB(tz)<sub>3</sub>) gives readily [Ru{η<sub>3</sub>-HB(tz)<sub>3</sub>}(CO)<sub>2</sub>]<sub>2</sub> (1). 1 Reacts further with halogens to give [Ru{η<sub>3</sub>-HB(tz)<sub>3</sub>}(CO)<sub>2</sub>X] (X = Br, I). The solid-state structure of 1 was determined by the x-ray crystallog. to reveal a Ru-Ru bond length of 2.8688(7) Å, significantly shorter than the reported value of 2.882(1) Å in [Ru{η<sub>3</sub>-HB(pz)<sub>3</sub>}(CO)<sub>2</sub>]<sub>2</sub> (2) (pz = 1-pyrazolyl), though both structures are similar in having a cis staggered geometry: a 8.9687(21), b 14.444(4), c 23.114(5) Å, β 99.241(20)°, monoclinic, space group P21/c, Z = 4, R = 0.026, and Rw = 0.024 based on 4467 with 1 > 2.0 σ(l). By comparing the variable-temperature NMR spectra of 1 and 2, the fluxional mechanism of both compds. should involve participation of the equatorial semibridging carbonyls, undergoing pairwise exchange with synchronous nondissociative rotation of the tris(azolyl)borato group around the Ru---B bond, probably with more or less rotation about the Ru-Ru bond. A higher 1-electron irreversible oxidation potential at Ep,a = 633 mV vs. Ag/AgNO<sub>3</sub> in MeCN was observed for 1 than that for 2 (Ep,a = 312 mV), consistent with the sluggish reactivity of 1 toward diiodine. The stronger oxidation resistance and the unexpected results of a Ru-Ru and a Ru-L bond length reduction in 1, to its analog, 2, lead to the recognition that the HOMO is probably a σ orbital for 1 and 2, though both compds. have the same filled orbitals of σ, π, δ, δ\*, and π\* as [Ru<sub>2</sub>(CO)<sub>4</sub>(OAc)<sub>2</sub>L<sub>2</sub>] (L = axial ligand).

L18 ANSWER 22 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:503340 HCAPLUS Full-text

DOCUMENT NUMBER: 121:103340

TITLE: Application of the EPOS (Enhanced polymer one-step staining) method to rapid intraoperative diagnosis.

Suitable staining conditions for localizing cell proliferation-associated nuclear antigens (PCNA and Ki-67 antigen)

AUTHOR(S): Serizawa, Akihiko; Kawai, Kenji; Yasuda, Masanori; Tsutsumi, Yutaka  
 CORPORATE SOURCE: Sch. Med., Tokai Univ., Isehara, 259-11, Japan  
 SOURCE: Byori to Rinsho (1994), 12(6), 745-8  
 CODEN: BYRIEM; ISSN: 0287-3745  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese

AB Optimal conditions of EPOS were determined for PCNA and Ki-67 using human tonsil with hyperplasia. Formalin-MeOH mixture (50:50) gave good results for PCNA by 15 s fixation, and single use of acetone, EtOH, or MeOH gave poor results. The mixture gave poor results in Ki-67 staining, and 10% formalin or 4% buffered paraformaldehyde gave good results. Good staining period was 3 or 5 min. The development solution of 20 mg/dL DAB-H<sub>2</sub>O<sub>2</sub>-Tris-HCl (pH 7.6) containing 10 mM imidazole gave good staining results by 2 min.

L18 ANSWER 23 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:30883 HCPLUS Full-text  
 DOCUMENT NUMBER: 120:30883  
 TITLE: Fe<sub>3</sub>-triangle opening and closing by a single two-electron process: role of the one-electron-reduced intermediate in the electrocatalytic ligand substitution reactions of Fe<sub>3</sub>(CO)<sub>9</sub>(μ<sub>3</sub>-PMn(CO)2Cp)2  
 AUTHOR(S): Koide, Yoshihiro; Schauer, Cynthia K.  
 CORPORATE SOURCE: Dep. Chem., Univ. North Carolina, Chapel Hill, NC, 27599-3290, USA  
 SOURCE: Organometallics (1993), 12(12), 4854-62  
 CODEN: ORGND7; ISSN: 0276-7333  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The thermodynamically unstable radical [Fe<sub>3</sub>(CO)<sub>9</sub>(μ<sub>3</sub>-PMn(CO)2Cp)2]•- (1•-) is implicated as the active species in the electron transfer chain (ETC) catalytic ligand substitution of the Fe-bound carbonyl ligands in Fe<sub>3</sub>(CO)<sub>9</sub>(μ<sub>3</sub>-PMn(CO)2Cp)2 (1). 1•- Is the 1-e- reduced intermediate relating the closed cluster 1 (with three Fe-Fe bonds) and the open cluster 12- (with two Fe-Fe bonds); interconversion between 1 and 12- occurs in a single 2-e- wave (ΔE<sub>p</sub> = 36 mV) in the cyclic voltammogram. Substitution of CO by P(OMe)<sub>3</sub> or PMe<sub>3</sub> can be induced by passing a small amount of cathodic current while a cyclic voltammogram is acquired in the presence of PR<sub>3</sub> to sequentially produce Fe<sub>2</sub>(CO)<sub>8</sub>(PR<sub>3</sub>)(μ<sub>3</sub>-PMn(CO)2Cp)2 (11, R = OMe; 12, R = Me) and then Fe<sub>3</sub>(CO)<sub>7</sub>(PR<sub>3</sub>)<sub>2</sub>(μ<sub>3</sub>-PMn(CO)2Cp)2 (21, R = OMe; 22, R = Me); no tris-substituted clusters are observed under electrocatalytic conditions. The sequential substitutions of CO by PR<sub>3</sub> occur on two different Fe(CO)<sub>3</sub> groups. The 2-e- behavior observed for 1 is maintained in the PR<sub>3</sub>-substituted derivs. The same clusters can also be produced on a preparative scale in THF solution using a catalytic amount of sodium benzophenone ketyl to initiate the radical chain in the presence of the appropriate stoichiometric amount of PR<sub>3</sub>. Reactions between 12- and PR<sub>3</sub> can be induced by oxidative electrochem., but the reactions are not electrocatalytic. The efficiency of the ETC reaction was gauged by the measurement of turnover nos. (TN) for the P(OMe)<sub>3</sub> substitution reaction. The first step proceeds with a TN of .apprx.1000 mol/faraday while TN for the second substitution step drops to .apprx.100 mol/faraday. The substitution reaction rate is insensitive to the nature and concentration of the incoming nucleophile, and the reaction is strongly inhibited by a CO

atmospheric, all consistent with a CO-dissociative mechanism. The isolated PR3-substituted clusters are unstable to bulk reduction. The monosubstituted clusters undergo a rapid, clean disproportionation reaction that is induced by a ligand redistribution corresponding to the net reaction 11 (or 12) + 1e- → 12- + 21 (or 22).

L18 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:401756 HCAPLUS Full-text

DOCUMENT NUMBER: 119:1756

TITLE: Chromatographic purification of erythropoietin

INVENTOR(S): Por-Hsiung, Lai; Strickland, Thomas Wayne

PATENT ASSIGNEE(S): Kirin-Amgen, Inc., USA

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8607594	A1	19861231	WO 1986-US1342	19860620
W: AU, DK, JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4667016	A	19870519	US 1985-747119	19850620
IL 79176	A	19920621	IL 1986-79176	19860420
CA 1297635	C	19920317	CA 1986-511855	19860618
ZA 8604573	A	19870225	ZA 1986-4573	19860619
ES 556257	A1	19880101	ES 1986-556257	19860619
EP 228452	A1	19870715	EP 1986-904556	19860620
EP 228452	B1	19950322		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 63503352	T	19881208	JP 1986-503570	19860620
JP 06098019	B	19941207		
AU 606578	B2	19910214	AU 1986-61230	19860620
AU 8661230	A	19870113		
IL 97135	A	19920621	IL 1986-97135	19860620
AT 120208	T	19950415	AT 1986-904556	19860620
DK 8700813	A	19870218	DK 1987-813	19870218
DK 175251	B1	20040719		
CA 1312994	C2	19930119	CA 1991-616009	19910221
PRIORITY APPLN. INFO.:			US 1985-747119	A 19850620
			US 1986-872152	A 19860613
			CA 1986-5118557	A3 19860618
			IL 1986-79176	A 19860620
			WO 1986-US1342	W 19860620

AB Methods for chromatog. purification of erythropoietin from a variety of sources, including biol. fluids or transgenic animal cell lines, is described. The first method is a reversed-phase chromatog. that involves adsorption of the erythropoietin onto a C4 or C6 resin followed by elution with increasing concns. of EtOH (either stepwise or in a gradient); after removal of EtOH, an erythropoietin fraction of high specific activity with yield ≥50% is obtained. A second method using anion-exchange chromatog. on DEAE-agarose at acid pH under conditions that prevent activation of acid proteinases is also described. The two methods may be combined for rapid purification of erythropoietin in high yield and purity. Culture supernatants from CHO cells stably expressing the erythropoietin gene on the plasmid pDSVL-gHuEPO were

concentrated by diafiltration and fractionated by chromatog. on VYDAC 214TP-B using a 0-80% EtOH gradient in 10 mM tris pH 7.0. The peak of UV absorption eluting around 60% EtOH was pooled and applied to a DEAE-agarose column which was washed with an acid 6M urea buffer to remove proteinases and the urea removed and the column brought to neutral pH with a low-salt buffer. CuSO<sub>4</sub> is optionally present in the wash to assist in oxidation of sulphydryl groups of undesired protein. Erythropoietin was eluted with a buffer containing NaCl 75 mM. Final purity of the erythropoietin is >95% and is low in pyrogens and serum proteins.

L18 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:525604 HCAPLUS Full-text

DOCUMENT NUMBER: 115:125604

TITLE: On the synthesis and characterization of bis(semibenzoquinonediiminato)copper as a donor precursor of the semiconducting and ferromagnetic Cu[C<sub>6</sub>H<sub>4</sub>(NH)<sub>2</sub>]<sub>2</sub>(I<sub>3</sub>)<sub>1.66</sub> charge-transfer complex

AUTHOR(S): Ricciardi, Giampaolo; Rosa, Angela; Morelli, Giancarlo; Lelj, Francesco

CORPORATE SOURCE: Dep. Chem., Univ. Basilicata, Potenza, 85100, Italy

SOURCE: Polyhedron (1991), 10(9), 955-61

CODEN: PLYHDE; ISSN: 0277-5387

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis and characterization of Cu(s-bqdi)<sub>2</sub> (s-bqdiH<sub>2</sub> = semibenzoquinonediimine) are described and its relevant properties are compared with those of the known d<sub>8</sub> and d<sub>6</sub> metal bis- or tris-benzoquinonediiminates. The complex is paramagnetic in the solid state with  $\mu_{eff} = 1.86 \mu_B$ . The dominant form of Cu(s-bqdi)<sub>2</sub> in aliphatic alcs. like MeOH, EtOH, BuOH or in THF is dimeric or oligomeric, but monomeric in MeCN, DMSO and DMF, as proved by UV-visible and ESR spectra. The stability of Cu(s-bqdi)<sub>2</sub> to O exposure in different solvents parallels the association behavior and follows the order: EtOH » DMF » MeCN. The electrochem. response of the [Cu-N4]-system ( $z = 0, \pm 1, \pm 2$ ) in MeCN consists of two 0 .dblharw. + 1 ( $E_{1/2} = -0.10$  V vs SCE) and + 1 .dblharw. + 2 ( $E_{1/2} = +0.98$  V vs SCD) reversible electron transfers and an irreversible process at  $E_p, c = -1.87$  V attributed to 0 → -1 reduction. Iodination of an ethanolic solution of Cu(s-bqdi)<sub>2</sub> led to the isolation of polycryst. Cu(s-bqdi)<sub>2</sub>I<sub>5</sub> which is formulated as Cu(s-bqdi)<sub>2</sub>(I<sub>3</sub>)<sub>1.66</sub> on the basis of IR, Raman and thermogravimetric anal. The new material exhibits high, room-temperature conductivity ( $\sigma = 6.6 \cdot 10^{-2}$  S cm<sup>-1</sup>) and semiconducting behavior at 700-300 K, with a sharp transition at 215 K. Static magnetic susceptibility measurements provide  $\mu_{eff} = 1.23 \mu_B$  for Cu(s-bqdi)<sub>2</sub>(I<sub>3</sub>)<sub>1.66</sub> at 295 K which is found to obey the Curie-Weiss law between 70°K and 295°K. The elec. and magnetic behavior of Cu(s-bqdi)<sub>2</sub>(I<sub>3</sub>)<sub>1.66</sub> is due to strong homomol. intra- and interstack interactions between donor mols. with radical cationic character.

L18 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:71999 HCAPLUS Full-text

DOCUMENT NUMBER: 110:71999

ORIGINAL REFERENCE NO.: 110:11819a,11822a

TITLE: High-performance affinity chromatography of human progesterone receptor

AUTHOR(S): Boyle, Denis M.; Van der Walt, L. Andre

CORPORATE SOURCE: Dep. Chem. Pathol., Univ. Witwatersrand, Johannesburg,

SOURCE: 2000, S. Afr.  
 DOCUMENT TYPE: Journal of Chromatography (1988), 455, 434-8  
 LANGUAGE: CODEN: JOCRAM; ISSN: 0021-9673  
 English  
 AB Progesterone receptor was purified from breast cancer cells and uterine tissues of humans by high-performance affinity chromatog. An Ultraaffinity-EP column was used; the affinity matrix was prepared by recycling Organon 2058 in MeCN-H<sub>2</sub>O (50:50) for 24 h. Elution was with a solution containing N,N-dimethylformamide, Na thiocyanate, [3H]Organon 2058 in a 10 mM pH 7.6 Tris buffer containing EDTA and dithiothreitol. Recoveries were 40-50%. Results were satisfactory.

L18 ANSWER 27 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1981:457430 HCPLUS Full-text  
 DOCUMENT NUMBER: 95:57430  
 ORIGINAL REFERENCE NO.: 95:9661a,9664a  
 TITLE: Preparative capillary isotachophoresis: a micro method for the purification of erythropoietin  
 AUTHOR(S): Thorn, W.; Blaeker, F.; Weiland, E.  
 CORPORATE SOURCE: Inst. Org. Chem. Biochem., Univ. Hamburg, Hamburg, D-2000/13, Fed. Rep. Ger.  
 SOURCE: Journal of Chromatography (1981), 210(2), 319-25  
 DOCUMENT TYPE: CODEN: JOCRAM; ISSN: 0021-9673  
 LANGUAGE: English  
 AB Erythropoietin (I) was purified from the urine of a patient with chronic myeloid leukemia with high yield and high purification factor by capillary isotachophoresis by using a LKB Tachophor equipped with a micropreparative fraction collector. The length of the capillary column was 43 cm and a suitable buffer system was 10 mM Tris-chloride (pH 8.00)-15.38 mM glycine-Ba(OH)<sub>2</sub>. I was isolated from the urine by BzOH-Me<sub>2</sub>CO precipitation and gel filtration on Sephadex G 50 and 5 µL were used for isotachophoresis. Quantitation of the protein present in the zone with I activity was accomplished by estimating the real zone length of the I zone by using indigo tetrasulfonate and the UV signal length. There was a linear relation between the real zone length and the UV signal length. High accuracy was achieved in every run by determination of the time-distance delay following injection of 0.2 µL of a dye along with the sample. The dye did not affect resolution A purification factor of 228 and a recovery of 59% were achieved by isotachophoresis of I.

L18 ANSWER 28 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:190752 HCPLUS Full-text  
 DOCUMENT NUMBER: 92:190752  
 ORIGINAL REFERENCE NO.: 92:30761a,30764a  
 TITLE: Extraction-polarographic determination of cobalt(II) and nickel(II) as 2,2'-bipyridine complexes in acetonitrile  
 AUTHOR(S): Nagaosa, Yukio  
 CORPORATE SOURCE: Fac. Eng., Fukui Univ., Fukui, 910, Japan  
 SOURCE: Analytica Chimica Acta (1980), 115, 81-8  
 DOCUMENT TYPE: CODEN: ACACAM; ISSN: 0003-2670  
 LANGUAGE: English

AB The tris(2,2'-bipyridine)cobalt(II) complex gives a reversible d.c. wave with  $E_{1/2} = -1.02$  V vs. SCE and a sharp differential pulse peak at  $E_p = -1.03$  V in a salted-out MeCN phase. A simple selective method is described for the determination of Co(II); down to 0.25 µg Co(II) can be determined in the presence of large amounts of Ni, Zn, Cd, Pb, and Cu; Fe(III) can be masked with NaF. The method is applicable to the determination of >0.01% Co in Ni salts and >5 × 10<sup>-5</sup>% Co in Fe salts. Ni(II) can also be extracted from aqueous solution and determined by differential pulse polarog., even in presence of a 20-fold amount of Co(II) by masking with EDTA; >0.01% Ni in Co salts can be determined reproducibly.

L18 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:22506 HCAPLUS Full-text  
 DOCUMENT NUMBER: 88:22506  
 ORIGINAL REFERENCE NO.: 88:3605a,3608a  
 TITLE: 9-Butylazabicyclo[3.3.1]nonane radical cation, the first long-lived saturated amine radical cation  
 AUTHOR(S): Nelsen, Stephen F.; Kessel, Carl R.  
 CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, USA  
 SOURCE: Journal of the Chemical Society, Chemical Communications (1977), (14), 490-1  
 CODEN: JCCCAT; ISSN: 0022-4936  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB The title amine I, prepared by Wolff-Kishner reduction of the 3-keto compound gave a reversible cyclic voltammetry oxidation wave in acetone ( $E_0 = +0.74$  V vs. SCE.,  $\Delta E_p = 65$  mV) and is the first saturated amine not to show electrochem. irreversible oxidation. I•+ has a lifetime of several hours in CH<sub>2</sub>Cl<sub>2</sub> solns. prepared by tris-(p-bromophenyl)amine cation-hexachloroantimonate oxidation

L18 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1974:464957 HCAPLUS Full-text  
 DOCUMENT NUMBER: 81:64957  
 ORIGINAL REFERENCE NO.: 81:10359a,10362a  
 TITLE: Removal of catalyst from amorphous copolymers  
 INVENTOR(S): Plonsker, Larry  
 PATENT ASSIGNEE(S): Ethyl Corp.  
 SOURCE: U.S., 4 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3804815	A	19740416	US 1972-241182	19720405
PRIORITY APPLN. INFO.:			US 1972-241182	A 19720405

AB V-Al catalysts were removed from EP or EPDM rubber solns. by washing the copolymer solution with aqueous NaOH, separating the used aqueous NaOH solution, filtering the copolymer solution, and removing the aqueous phase which separated from the filtered product. Thus, an ethylene-propylene-1,4-hexadiene polymer [25038-37-3] was prepared in tetrachloroethylene with an iso-Bu<sub>2</sub>AlCl-V tris(acetylacetone) catalysts, mixed with an antioxidant, stirred 5 min with an equal volume of 20% aq.NaOH, and separated. The organic layer was again washed with an equal volume of 5% aqueous NaOH, removed, filtered, and separated from the small amount of aqueous phase. The solvent was removed by steam distillation, giving a rubber crumb.

L18 ANSWER 31 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1974:414272 HCPLUS Full-text  
 DOCUMENT NUMBER: 81:14272  
 ORIGINAL REFERENCE NO.: 81:2311a, 2314a  
 TITLE: Fiber-reinforced plastics  
 INVENTOR(S): Kajita, Hiroyuki; Nishio, Nobuyuki  
 PATENT ASSIGNEE(S): Meisei Chemical Works, Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 48100438	A	19731218	JP 1972-33084	19720331
JP 51008409	B	19760316		

PRIORITY APPLN. INFO.: JP 1972-33084 A 19720331

AB Manufacture of organic fiber-reinforced resins involved treatment with .geq.1 I (n .geq. 2, Z = n-valent organic or inorg. group, R = H, Me). For example, a solution of 12 parts 4,4'-bis(N',N'-ethylenureido)diphenylmethane (I) [7417-99-4] in 228 parts THF was mixed with a solution of 12 parts PVC [9002-86-2] (d.p. 800) containing 1.6 phr dioctyl phthalate and 1 phr Pb stearate in 108 parts THF and then with 1000 parts acetone. Nylon filaments (450 parts, 10 cm long) were impregnated with the mixed solution, dried at 100.deg. for 60 min, rolled with 2550 parts Zeon 103 EP-8, pulverized, and injection-molded to give a molding with flexural strength 13.06 kg/mm<sup>2</sup>, flexural modulus 603 kg/mm<sup>2</sup>, tensile strength 9.72 kg/mm<sup>2</sup>, and impact strength 3.97 kg-cm/cm<sup>2</sup>, compared with 10.18, 580, 6.01, and 2.65, resp., for a molding using a silane coupler in place of I. Other I used were tris(1-aziridinyl) phosphine oxide and hexamethylene diisocyanate-2-methylhexylamine adduct.

L18 ANSWER 32 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1974:121799 HCPLUS Full-text  
 DOCUMENT NUMBER: 80:121799  
 ORIGINAL REFERENCE NO.: 80:19617a, 19620a  
 TITLE: Aziridine couplers for fiber-reinforced plastics  
 INVENTOR(S): Kajita, Hiroyuki; Nishio, Nobuyuki  
 PATENT ASSIGNEE(S): Meisei Chemical Works, Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 48080170	A	19731026	JP 1972-11159	19720131
JP 51025073	B	19760728		

## PRIORITY APPLN. INFO.:

JP 1972-11159 A 19720131

AB The aziridine derivs. I ( $n \geq 2$ , Z = n-valent organic or inorg. radical, R = H or Me) were couplers for reinforcing synthetic resins with carbon, asbestos, and other inorg. fibers. For example, a solution of 12 parts bis[4-(1-aziridinyl)phenyl]methane [51287-38-8] in 228 parts THF was mixed with a solution of 12 parts PVC [9002-86-2] (d.p. 800) composition (containing 1.6 phr dioctyl phthalate and 1 phr Pb stearate) in 108 parts THF and thinned with 1000 volume parts acetone. Acrylic carbon fiber (10 mm long, 450 parts) was impregnated with the solution, blended with 2550 parts Zeon 103 EP-8, and injection-molded to give a molding with flexural strength 14.07 kg/mm<sup>2</sup>, flexural modulus 655 kg/mm<sup>2</sup>, tensile strength 10.90 kg/mm<sup>2</sup>, and impact strength 4.95 kg-cm/cm<sup>2</sup>, compared with 10.10, 565, 5.90, and 2.60, resp., for molding using a silane coupler. Tris(1-aziridinyl)phosphine oxide [545-55-1] and 2,4,6-triz(1-aziridinyl)-s-triazine [51-18-3] were also used, and phenolic and polyamide resins were also reinforced.

L18 ANSWER 33 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1973:107747 HCPLUS Full-text

DOCUMENT NUMBER: 78:107747

ORIGINAL REFERENCE NO.: 78:17295a,17298a

TITLE: Reaction mechanism of the Ca<sup>2+</sup>-dependent ATPase of sarcoplasmic reticulum from skeletal muscle. VIII. Molecular mechanism of the conversion of somatic energy to chemical energy in the sarcoplasmic reticulum

AUTHOR(S): Yamada, Sinpei; Sumida, Michihiro; Tonomura, Yuji

CORPORATE SOURCE: Fac. Sci., Osaka Univ., Tonaka, Japan

SOURCE: Journal of Biochemistry (Tokyo, Japan) (1972), 72(6), 1537-48

CODEN: JOBIAO; ISSN: 0021-924X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The sarcoplasmic reticulum (SR) was loaded with Ca<sup>2+</sup> by simply preincubating it in solns. containing various concns. of CaCl<sub>2</sub> and KCl and Tris-maleate at pH 7.0 and 0° for several hrs. When the Ca<sup>2+</sup>-loaded reticulum was put into a solution containing various buffers, MgCl<sub>2</sub>, KCl and 5mM inorg. phosphate-<sup>32</sup>P at pH 7.0 and 20°, P was rapidly incorporated into the SR. The maximum amount of P-incorporation reached 4 moles/106 g SR protein. The time-course of P-incorporation showed a lag phase, and a remarkably large dependence on temperature. The dependence of the amount of P incorporated ([EP]) in the steady state on Ca<sup>2+</sup>-gradient across the membrane and the concns. of Mg<sup>2+</sup> ions and inorg. phosphate in the phosphorylation medium was determined in relation to the ε (total concentration of phosphorylation site) and the electrochem. activities of Ca<sup>2+</sup> inside and outside the membrane, resp. When [EP]/ε was 0.5 in the presence of 20mM MgCl<sub>2</sub> and 5mM inorg. phosphate (Pi), the free energy obtained by transporting 2 moles of Ca<sup>2+</sup> from inside to outside the membrane was estimated to be .apprx.12 Kcal. The phosphorylation of the Ca<sup>2+</sup>-loaded SR

with Pi was competitively inhibited by ATP. At various pH values the stability of the acid-denatured phosphorylated intermediate formed by the reaction with Pi was equal to that of the intermediate formed by the reaction with ATP. Decomposition of the acid-denatured phosphorylated intermediate produced by the reaction with Pi was accelerated by adding NH<sub>2</sub>OH in the same way as that of the intermediate produced by the reaction with ATP. Furthermore, the SDS-gel electrophoretogram of the phosphorylated intermediate showed that P was incorporated in the protein moiety of the ATPase. When ADP was added to the Ca<sup>2+</sup>-loaded SR, 30 sec after starting the phosphorylation experiment, the amount of P incorporated decreased markedly and rapidly and ATP was formed. The amount of ATP synthesized was exactly half the amount of Ca<sup>2+</sup> ions loaded into the SR during the preincubation.

L18 ANSWER 34 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1969:436939 HCPLUS Full-text

DOCUMENT NUMBER: 71:36939

ORIGINAL REFERENCE NO.: 71:6805a

TITLE: Renal erythropoietic factor; some properties and its interaction with histones

AUTHOR(S): Kuratowska, Zofia; Kopec, Maria

CORPORATE SOURCE: Inst. Nucl. Res., Warsaw, Pol.

SOURCE: British Journal of Haematology (1969), 16(5), 465-73

CODEN: BJHEAL; ISSN: 0007-1048

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Rabbits were injected i.v. with CoCl<sub>2</sub> solution to stimulate production of renal erythropoietic factor. After 24 hrs., the kidneys were removed and homogenized and the cell nuclei were isolated. The nuclei were extracted with Tris buffer, pH 7.5, containing 5mM MgCl<sub>2</sub> and a fractionation procedure (described) yielded the nuclear protein fraction, which possessed erythropoietic activity. This was assayed by the method of W. Fried (1957). This activity was destroyed by proteolytic enzymes and by neuraminidase. It was completely inhibited by histones isolated from mammalian liver and from chicken erythrocytes. The most potent inhibitory effect was evoked by the arginine-rich histone fraction, while the lysine-rich fractions had no effect. It is proposed that the depression action of erythropoietin on RNA synthesis may result from its interaction with a histone-repressor mol.

L18 ANSWER 35 OF 36 HCPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1965:67150 HCPLUS Full-text

DOCUMENT NUMBER: 62:67150

ORIGINAL REFERENCE NO.: 62:11973f-h,11974a-b

TITLE: Epoxy organotin compounds for stabilizing resin compositions

INVENTOR(S): Mack, Gerry P.

PATENT ASSIGNEE(S): M & T Chemicals Inc.

SOURCE: 8 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3147285	-----	19640901	US 1956-599003	19560720
PRIORITY APPLN. INFO.:			US	19560720

AB To Et acrylate (0.2 mole), dissolved in 250 ml. ethylene dichloride (I), 1.44 moles Na<sub>2</sub>HPO<sub>4</sub> is added. The stirred mixture is heated to boiling and 90 ml. of a solution containing peroxytrifluoroacetic acid and 50 ml. I is added dropwise in 30 min. The mixture is refluxed for 30 min. and worked up to give 55% Et glycidate (II), b60 88-90°. One mole II is dissolved in 200 ml. toluene. To this mixture, 2 moles Bu<sub>2</sub>SnO (III) is slowly added. The reaction continues at its b.p. for 20 min. The toluene is boiled off to give a yellow viscous product. Similar products are obtained by using glyceryl monooleate, maleic anhydride, III; glyceryl dioleate, phthalic anhydride, III; N-(n-hexyl)-9,10-epoxystearamide, dioctyltin dimethoxide; Bu epoxystearate (IV), III; Me epoxystearate, dioctadecyltin oxide; n-octyl epoxystearate, trioctyltin oxide; isoocetyl epoxystearate, Me<sub>3</sub>SnO; cyclohexyl epoxystearate, dilauryltin oxide; 2-chloroethyl epoxystearate, Et<sub>2</sub>SnO; Ph epoxystearate, dicyclohexyltin oxide; glycidyl epoxystearate, Ph<sub>2</sub>SnO; tetrahydrofurfuryl epoxystearate, dithienyltin oxide; p-tert-butylphenyl epoxystearate, dibenzyltin oxide; epoxyoctadecyl epoxystearate, Me<sub>2</sub>SnO; Bu epoxytallate, dinaphthyltin oxide; Bu epoxysoyate, bis[tris(4-chlorobutyl)tin] oxide; epoxidized glycerol monoricinoleate triacetate, V; glycidol, Bu<sub>2</sub>SnCl<sub>2</sub>; epoxypropoxide, Bu<sub>2</sub>SnCl<sub>2</sub>; 5,6-epoxyoctanol, Bu<sub>2</sub>Sn(OMe)<sub>2</sub>; epoxidized soybean oil, III; IV, III, isoocetyl mercaptoacetate; p-(2,3-epoxypropoxy)phenylurea, Bu<sub>2</sub>SnCl<sub>2</sub>; "2,2'-(2-ethylhexanoylamino)diethyl diepoxysearate," III; IV, Bu<sub>2</sub>SnS; 3,4-epoxy-6-methylcyclohexylmethyl 3,4-epoxy-6-methylcyclohexanecarboxylate, III; epoxyethyl acetate, III; epoxyethyl 2-ethylhexanoate, III; and 2,3-epoxypropyl malonate, trihexyltin chloride. Also, dibutyltin S-(dodecyl mercaptido)-N-[N-(2,3-epoxypropyl)-p-toluenesulfonamide], dibutyltin S-(isoocetyl mercaptoacetate)-N-[N-(2,3-epoxypropyl)-p-toluenesulfonamide], dibutyltin N,N'-bis[N-(2,3-epoxypropyl)-p-toluenesulfonamide], bis[p-(epoxyethyl)phenyl]-tin bis(9,10-epoxystearate), and bis(epoxyethyl)tin bis(9,10-epoxystearate) are prepared for use as heat stabilizers in resins. A number of these stabilizers were incorporated into a mixture of 100 parts poly(vinyl chloride) (Geon 101 EP) and 50 parts plasticizer (dioctyl phthalate) in amts. of 1-2% based on poly(vinyl chloride). The samples were rated visually for color after 15, 30, 45, 60, 75, and 120 min. at 350°F after milling for 5 min. at 320-5°F. The stabilizers were also evaluated in chlorinated rubber (67% Cl), a 60:40 vinyl chloride/vinylidene chloride copolymer, and a 80:20 vinyl chloride/vinyl acetate copolymer.

L18 ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1964:30829 HCAPLUS Full-text  
 DOCUMENT NUMBER: 60:30829  
 ORIGINAL REFERENCE NO.: 60:5458e-h,5459a-c  
 TITLE: Esters containing epoxide groups  
 INVENTOR(S): Humphreys, Keith W.; Stark, Bernard P.; Webb, Reginald F.  
 PATENT ASSIGNEE(S): CIBA (A.R.L.) Ltd.  
 SOURCE: 18 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
GB 943924		19631211	GB 1960-12064	19600405
PRIORITY APPLN. INFO.:			GB	19600405

GI For diagram(s), see printed CA Issue.

AB Isomeric esters of the general formula I, where n is 2, 3, or 4 and Z is the residue of an organic compound containing n carboxyl groups or n is 1 and Z is a cycloaliphatic carboxylic acid group with a fused epoxide group, are prepared and can be cross-linked with hardeners such as amines, amides, and Friedel-Crafts catalysts. Thus, a mixture of 30 g. dihydrodicyclopentadienols, 11.8 g. succinic acid, 2 g. p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H, and 100 ml. PhMe is refluxed 2 hrs., cooled, and evaporated to dryness to give 38.2 g. bis(dihydrodicyclopentadienyl) succinates (II). A mixture of 38.2 g. II, 50 ml. CHCl<sub>3</sub>, and 6 g. NaOAc is agitated at 30° under CO<sub>2</sub>, com. AcOOH (47.2 g. solution containing 4.665 g. mol. AcOOH/kg.) is added in 5 min., the mixture kept 3.5 hrs. at 30°, and 200 ml. H<sub>2</sub>O and 50 ml. CHCl<sub>3</sub> added. The 2 phases that form are separated, the aqueous phase is washed twice with 100 ml. CHCl<sub>3</sub>, the (CHCl<sub>3</sub> mixts. mixed with 200 ml. 10% NaHCO<sub>3</sub>, the aqueous phase extracted twice with 50 ml. CHCl<sub>3</sub>, the organic phases shaken with 200 ml. saturated FeSO<sub>4</sub>, the aqueous phase extracted twice with 50 ml. CHCl<sub>3</sub>, and the organic phases dried, filtered, and evaporated to give 39.1 g. bis[4-oxatetracyclo[6.2.1.0<sub>2,7.03,5</sub>]undec-9(and 10)-yl] succinates, m. 145-50°. Also prepared are bis(dihydrodicyclopentadienyl maleates (III), the epoxy esters of III, bis(dihydrodicyclopentadienyl) phthalates (IV), a mixture of isomeric bisepoxides of IV, bis(dihydrodicyclopentadienyl) Δ<sub>4</sub>-tetrahydrophthalates, a mixture of bis[4-oxatetracyclo[6.2.1.0<sub>2,7.03,5</sub>]undec-9(and 10)-yl] Δ<sub>4</sub>-tetrahydrophthalates, bis(dihydrodicyclopentadienyl) adipates (V), a mixture of isomeric bisepoxides of V, dihydrodicyclopentadienyl tetrahydrobenzoates (VI), (b<sub>0.8</sub> 130-2°), a mixture (b<sub>0.8</sub> 200°) of isomeric bisepoxides of VI, dihydrodicyclopentadienyl 2,5-endomethylene-Δ<sub>3</sub>-tetrahydrobenzoates, 4-oxatetracyclo [6.2.1.0<sub>2,7.02,5</sub>]undec-9(and 10)-yl 3-oxatricyclo[3.2.1.0<sub>2,4</sub>] octane-6-carboxylate (infrared: 855 and .apprx.843 cm.<sup>-1</sup>), bis(dihydrodicyclopentadienyl) sebacates (VII), a mixture of isomeric bisepoxides of VII, dihydrodicyclopentadienyl ethers of dihydrodicyclopentadienyl lactates (VIII) (b<sub>0.5</sub> 200-10°), a mixture of isomeric bisepoxides of VIII, bis(dihydrodicyclopentadienyl) methylendomethylenetetrahydrophthalates (IX), mixture of isomeric bisepoxides of IX, bis(dihydrodicyclopentadienyl) 3,4,5,6,7,7-hexachloro-3,6-endomethylenetetrahydrophthalates (X), a mixture of isomeric bisepoxides of X, tris(dihydrodicyclopentadienyl) trimellitates (XI), a mixture of isomeric bisepoxides of XI, dihydrodicyclopentadienyl oleates (XII), a mixture of isomeric bisepoxides of XII, dihydrodicyclopentadienyl esters (XIII) of a tall oil fatty acid, epoxidized XIII (XIV), dihydrodicyclopentadienyl esters (XV) of a corn oil fatty acid, epoxy esters of XV, dihydrodicyclopentadienyl esters (XVI) of a cottonseed fatty acid, epoxy esters of XVI, dihydrodicyclopentadienyl esters (XVII) of castor oil fatty acids, epoxy esters of XVII, dihydrodicyclopentadienyl esters (XVIII) of soya fatty acids, epoxy esters of XVIII, dihydrodicyclopentadienyl esters (XIX) of tung oil fatty acids, epoxy esters of XIX, dihydrodicyclopentadienyl esters (XX) of rapeseed oil fatty acids, epoxy esters of XX, dihydrodicyclopentadienyl esters (XXI) of olive oil fatty acids, epoxy esters of XXI, dihydrodicyclopentadienyl esters (XXII) of peanut oil fatty acids, epoxy esters of XXII, dihydrodicyclopentadienyl esters (XXIII) of linseed oil fatty acids, epoxy esters of XXIII, dihydrodicyclopentadienyl esters (XXIV) of sunflower oil fatty acids, epoxy esters of XXIV, dihydrodicyclopentadienyl esters (XXV) of a dimerized fatty acid, and epoxidized XXV. XIV 100 is heated at 120°, phthalic anhydride 60 dissolved in XIV, PhCH<sub>2</sub>NMe<sub>2</sub> 2 parts by weight added, and the mixture cured 12 hrs. at 120° and 24 hrs. at 140° to give a formulation, pot life (120°) 4 hrs. 22 min., H<sub>2</sub>O absorption (7 days at 25°) 0.55%, shrinkage (cyclic test): slight cracks after 2nd cycle, dielec. strength (20°) 430 v./mil; 10 min., 1.53%, shattered into pieces after 1st cycle, and 305 v./mil, resp., for the control (EP 201).

```
=> => d stat que l27
L1      1 SEA FILE=REGISTRY ABB=ON    PLU=ON  ERYTHROPOIETIN/CN
L2      2283 SEA FILE=REGISTRY ABB=ON   PLU=ON  ERYTHROPOIETIN? NOT L1
L3      1 SEA FILE=REGISTRY ABB=ON    PLU=ON  THAM/CN
L4      SEL  PLU=ON  L1 1- CHEM :          9 TERMS
L5      47045 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L4
L6      47188 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L5 OR L2 OR ERYTHROPOIETIN OR
      EPO
L7      SEL  PLU=ON  L3 1- CHEM :          53 TERMS
L8      138363 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L7
L9      138382 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L8 OR THAM OR TRISHYDROXYMETHYL
      LAMINOMETHANE OR TRIS? (A)HYDROXY? (A)METHYL? (A)AMINO? (A)METHAN?
L13     14931 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L1 OR ERYTHROPOIETIN?
L14     6724 SEA FILE=HCAPLUS ABB=ON    PLU=ON  L3 OR TRISHYDROXYMETHYLAMINOME
      THANE?
L15     18 SEA FILE=HCAPLUS ABB=ON    PLU=ON  L13 AND L14
L16     3140 SEA FILE=HCAPLUS ABB=ON   PLU=ON  L6(L)(SOLUTION OR FORMULAT?)
L21     309 SEA FILE=HCAPLUS ABB=ON   PLU=ON  ARNOLD STEPHEN?/AU OR ARNOLD
      S/AU OR ARNOLD S ?/AU
L22     20 SEA FILE=HCAPLUS ABB=ON   PLU=ON  ("FRANSSEN O"/AU OR "FRANSSEN
      OKKE"/AU)
L23     5 SEA FILE=HCAPLUS ABB=ON    PLU=ON  ("MEKKING A"/AU OR "MEKKING
      ALBERT"/AU)
L24     0 SEA FILE=HCAPLUS ABB=ON    PLU=ON  L21 AND (L22 OR L23)
L25     1 SEA FILE=HCAPLUS ABB=ON    PLU=ON  L22 AND L23
L26     1 SEA FILE=HCAPLUS ABB=ON    PLU=ON  (L21 OR L22 OR L23) AND (L6
      OR L9)
L27     0 SEA FILE=HCAPLUS ABB=ON    PLU=ON  (L24 OR L25 OR L26) NOT (L15
      OR L16)
```

&lt;&gt;

... & his ful

FILE 'REGISTRY' ENTERED AT 10:22:15 ON 15 APR 2008  
L1 1 SEA ABB=ON PLU=ON ERYTHROPOIETIN/CN  
L2 2283 SEA ABB=ON PLU=ON ERYTHROPOIETIN? NOT L1  
L3 1 SEA ABB=ON PLU=ON THAM/CN

FILE 'HCAPLUS' ENTERED AT 10:24:05 ON 15 APR 2008

FILE 'REGISTRY' ENTERED AT 10:24:44 ON 15 APR 2008  
SET SMARTSELECT ON  
L4 SEL PLU=ON L1 1- CHEM : 9 TERMS  
SET SMARTSELECT OFF

FILE 'HCAPLUS' ENTERED AT 10:24:45 ON 15 APR 2008  
L5 47045 SEA ABB=ON PLU=ON L4  
L6 47188 SEA ABB=ON PLU=ON L5 OR L2 OR ERYTHROPOIETIN OR EPO

FILE 'REGISTRY' ENTERED AT 10:26:08 ON 15 APR 2008  
SET SMARTSELECT ON  
L7 SEL PLU=ON L3 1- CHEM : 53 TERMS  
SET SMARTSELECT OFF

FILE 'HCAPLUS' ENTERED AT 10:30:14 ON 15 APR 2008  
L8 138363 SEA ABB=ON PLU=ON L7  
L9 138382 SEA ABB=ON PLU=ON L8 OR THAM OR TRISHYDROXYMETHYLAMINOMETHANE  
OR TRIS? (A) HYDROXY? (A) METHYL? (A) AMINO? (A) METHAN?  
L10 159 SEA ABB=ON PLU=ON L6(L)L9  
L11 3585784 SEA ABB=ON PLU=ON (SOLUTION/CV OR DISSOLUTION/CV) OR  
?SOLUTION?  
L12 37 SEA ABB=ON PLU=ON L10 AND L11  
L13 14931 SEA ABB=ON PLU=ON L1 OR ERYTHROPOIETIN?  
L14 6724 SEA ABB=ON PLU=ON L3 OR TRISHYDROXYMETHYLAMINOMETHANE?  
L15 18 SEA ABB=ON PLU=ON L13 AND L14  
D STAT QUE L15  
D IBIB ABS HITSTR L15 1-18  
L16 3140 SEA ABB=ON PLU=ON L6(L) (SOLUTION OR FORMULAT?)  
L17 37 SEA ABB=ON PLU=ON L10 AND L12  
L18 36 SEA ABB=ON PLU=ON L17 NOT L15  
D STAT QUE L18  
D IBIB ABS HITSTR L18 1-36  
L21 309 SEA ABB=ON PLU=ON ARNOLD STEPHEN?/AU OR ARNOLD S/AU OR  
ARNOLD S ?/AU  
L22 20 SEA ABB=ON PLU=ON ("FRANSSEN O"/AU OR "FRANSSEN OKKE"/AU)  
L23 5 SEA ABB=ON PLU=ON ("MEKKING A"/AU OR "MEKKING ALBERT"/AU)  
L24 0 SEA ABB=ON PLU=ON L21 AND (L22 OR L23)  
L25 1 SEA ABB=ON PLU=ON L22 AND L23  
L26 1 SEA ABB=ON PLU=ON (L21 OR L22 OR L23) AND (L6 OR L9)  
L27 0 SEA ABB=ON PLU=ON (L24 OR L25 OR L26) NOT (L15 OR L16)  
D STAT QUE L27

## FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 APR 2008 HIGHEST RN 1014671-54-5

US 10/581269

DICTIONARY FILE UPDATES: 14 APR 2008 HIGHEST RN 1014671-54-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

#### FILE HCPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 15 Apr 2008 VOL 148 ISS 16

FILE LAST UPDATED: 14 Apr 2008 (20080414/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details

This file contains CAS Registry Numbers for easy and accurate substance identification.